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Regional and clinical guidelines for prevention and care of obstetric anal sphincter injuries - A critical frame analysis

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ABSTRACT

Objective: Policy documents govern how the prevention and care of obstetric anal sphincter injuries (OASIS) are implemented. Thus, in the absence of Swedish national guidelines on OASIS, differing views may be visible in the regional and local policy documents. Therefore, we aimed to analyse regional and local policies, guidelines, and care programs on the prevention of OASIS and care for OASIS-affected women in a Swedish context by applying a critical frame analysis inspired by Verloo.

Design and setting: A cross-sectional study of existing policy documents from Swedish healthcare regions was performed. The documents were analysed using Verloo's critical frame analysis.

Findings: We found that OASIS was framed as a preventable problem addressed by skilled protective manoeuvres of the healthcare staff. Education, communication, and teamwork were three frames of crucial solutions to minimise the prevalence of OASIS. However, complicating power dimensions between professional groups and between professionals and birthing women were identified. Furthermore, several discursive struggles were found, predominantly regarding the scientific evidence for the suggested prevention and care.

Conclusion: The policy documents emphasised that OASIS is preventable, and improved education, communication, and teamwork could diminish the OASIS prevalence. Nevertheless, power dimensions and discursive struggles may challenge the preventive efforts. Furthermore, each Swedish region has the sovereignty to develop its policies, which was reflected in our findings and may imply inequities in care provision. Thus, there is an urgent need to develop comprehensive national high-quality guidelines of high quality for OASIS prevention and care so that all women giving birth have access to equal care and treatment in Sweden.

Background

About 90% of all women sustain some degree of perineal laceration during childbirth (Smith et al., 2013). Internationally, 0.5 to 2.5% of vaginal births are complicated by obstetric anal sphincter injuries (OASIS), i.e. partial (OASIS grade 3) or total rupture (OASIS grade 4) of the anal sphincter muscle (Byrd et al., 2005). In Sweden in 2021, an OASIS occurred in 2.5% of vaginal births, of which 4.6% were first-time mothers, and 1.1% had previous childbirth(s). There has been a decrease during the last decade. However, the annual prevalence varies (1.7 – 3.6%) between the regions, and the register does not provide any information about OASIS in vaginal births after a previous caesarean section for women with previous childbirths (The Medical Birth Register (SWE: Medicinska födelseregistret), 2021). Studies indicate that OASIS may imply short- and long-term maternal morbidities in terms of pain (Andrews et al., 2008; Lindqvist et al., 2019, 2018), incontinence (LaCross et al., 2015; Lindqvist et al., 2019, 2018), defecation problems, vaginal prolapse, and sexual dysfunction (Lindqvist et al., 2018; Samarasekera et al., 2008). Many women also perceive anatomical changes after the injury (Iles et al., 2017; Lindqvist et al., 2019). Further, 54% reported at least one morbidity caused by OASIS in an Australian study (Evans et al., 2020). The negative aspects of OASIS and subsequent anal incontinence are suggested to form an "OASIS syndrome", i.e. a covert women's condition with emotional, social, and psychological consequences (Keighley et al., 2016). Moreover, the ability to act as a mother is affected (Keighley et al., 2016; Lindqvist et al., 2018), and psychological concerns such as shame, fear, isolation, and anxiety related to the social implications of OASIS (Darmody et al., 2020)

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and depressive symptoms following OASIS are also described (Desseauve et al., 2016).

However, despite the prevalence of OASIS and related morbidity, only some countries have developed national guidelines on OASIS and its connected care. Guidelines are defined as 'statements that include recommendations intended to optimise patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options'(Institute of Medicine Committee on Standards for Developing Trustworthy Clinical Practice Guidelines, 2011). Reviews (Nygaard et al., 2020; Roper et al., 2020) have explored the quality of existing national guides using the Appraisal of Guidelines for Research and Evaluation (AGREE) II tool. According to AGREE II, assessments of >70% are classified as guidelines of high quality (AGREE Advancing the science of practice guidelines, 2017). For example, Nygaard et al. (Nygaard et al., 2020) assess, in their review, three out of 12 national guidelines as high quality, whilst Roper et al. (Roper et al., 2020) report eight out of 13 national guidelines being of high quality and four national guidelines score >90% according to the AGREE II tool.

The Swedish Patient Act state that the patient should obtain expert and careful healthcare of high quality and in line with scientific evidence and proven clinical practice (The Government of Sweden, 2014). Sweden lacks national guidelines on OASIS, but there are recommendations that all birth clinics should have local routines for providing affected women with help and support (Bäckenbottenutbildning, 2019). Without national guidelines, each region has the sovereignty to develop its own regional and local policies for its birth clinics. Thus, there are reasons to assume that, in the absence of national guidelines on OASIS, differing views on how to prevent and treat OASIS can be shared and visible in existing regional and local policies on OASIS. Such differing views may imply so-called "discursive struggles" (Pluut, 2017), i.e. contradictory constructions where statements declared in the Patient act (The Government of Sweden, 2014) or presented in evidence-based medicine do not align with the guidelines. Hence, it is essential to study the health care's understanding of the problem and how causes, consequences, and interventions are described.

In sum, only a few high and middle-income countries have national guidelines on the prevention and care of OASIS, and even fewer are assessed to be of high quality. For example, there is no national guideline addressing OASIS in Sweden, but a nationally available web-based educational program (Bäckenbottenutbildning, 2019). Thus, there is reason to believe that divergences in regional policies, guidelines, and care programs may contribute to inequalities in health care for affected women. Therefore, the overall aim of this study was to analyse regional and local policies, guidelines, and care programs on the prevention of OASIS and care for OASIS-affected women in a Swedish context by applying a critical frame analysis inspired by Verloo.

Method

A cross-sectional research design was applied. Regional and local policies, guidelines, and care programs for OASIS care were assembled throughout the 21 regions in Sweden. A critical framework analysis (CFA) inspired by Verloo (Verloo, 2005, 2007) was applied to reveal how reality meanings are constructed and shape what types of actions are taken.

Study context

In Sweden, the healthcare sector is organised through 21 partly independent regions, primarily responsible for funding and providing healthcare services to the population within each area. The regional governments are elected in general elections every four years. The Swedish state governs and regulates the regions through the Health and Medical Service Act (The Government of Sweden, 2017) and policies that provide general frames of what the regions are obliged to do and must abide by. Within these frames, regions have substantial autonomy to decide upon details and practices regarding healthcare delivery within each region. Thus, policies regarding healthcare interventions may differ depending on regional priorities, the financial situation, and political commitments (Swedish Association of Local Authorities and Regions (SALAR), 2019). In 2015, the Swedish government initiated an investment to strengthen intrapartum care and women's health, including substantial economic support to the regions to implement activities that should diminish potential complications and persisting morbidities related to childbirth (Socialdepartementet, 2015).

Data collection

All 21 healthcare regions in Sweden were contacted to collect available documents regarding OASIS, such as regional and local policies, care programs, or documents developed to aid healthcare professionals in preventing or managing OASIS, published until December 2018. Two reminders were posted with about one month in between reminders. Additionally, questions were posed about whether there had been any educational interventions for the staff during the last years addressing OASIS and what type of educational events. Questions were also included if any additional activities aimed at preventing perineal tears were performed for the staff. The data collection resulted in documents ranging from two to more than 40 pages from 16 of the 21 regions.

Analysis

We have used a CFA approach inspired by Verloo (Verloo, 2005) to scrutinise how the construction of prevention and care of OASIS was described and understood in the documents. Aligning with Verloo (23), how the policies and the recommendations are framed rests not only on hard-core medical evidence but also on underlying beliefs and perceptions (Fischer, 2003). The frame concept implies 'an interpretation scheme that structures the meaning of reality' (Verloo, 2005). Some analytical questions to the documents were developed in line with the CFA approach (Verloo, 2005) to scrutinise the topics:

- How was OASIS described in the documents? *(identifying the nature of the problem*)
- What was the root cause of OASIS regarded to be? *(identifying proposed causes and effects of the problem)*
- Who was responsible for the problem? *(identifying responsibilities for the problem)*
- What potential actions could prevent OASIS? *(proposed solutions to the problem)*
- Were there signs of 'discursive struggle', i.e. different understandings of the problem?

Verloo (Verloo, 2005) suggests that adding sub-elements of inclusion/exclusion and power to the analytical questioning may deepen the analysis further. The analysis of the documents was performed in three interconnected steps to identify the framings and how similarities and contradictions of frames contributed to creating principles and actions for the prevention and care of OASIS. The initial step involved repeated reading of all OASIS documents, including writing notes to identify potential codes and preliminary key structural principles identified by the analytical questions. Second, the identified codes were explored concerning emerging key terms and their structural position to examine their links to the complete framing of OASIS prevention and care. At this

step, we also studied possible elements of inclusion/exclusion of power dimensions in the documents and if there were signs of discursive struggles. After that, the final step of the analysis aimed to evaluate the emerging frames and their related principles and dimensions. Similarities and controversies and how these supported or undermined the diagnostics and solutions to the problems were reviewed. Finally, the emergent framings were discussed repeatedly amongst authors to secure unbiased consistency of the interpretations (Verloo, 2005).

Results

Presentation of participating regions

Sixteen of the 21 healthcare regions responded (76.2%). The characteristics of the regions are presented in Table 1. The non-participating regions covered about 11% of the total deliveries and OASIS in 2018.

In regions with more than one birth clinic, collaboration was seen between the birth clinics to develop shared documents and guidelines for all birth clinics within the region. In addition, a few regions with one smaller birth clinic collaborated with larger regions about the policies. During the data collection, nine of the 16 regions (56.2%) had developed regional guidelines and recommendations for preventing and managing OASIS. One region had no guidelines, but instructions regarding the suturing of OASIS, and three regions reported that they had initiated the development of regional guidelines for OASIS prevention and care.

In the following, we present the identified frames where the first represents the overarching nature of the problem "*OASIS is preventable but still happens*". After that, we introduce three frames related to the solution to the OASIS problem; "*Enhanced education to improve staffs' competence and skills", "Increased communication to minimise the risk of sustaining OASIS",* and *"Improved teamwork could diminish the risk for OASIS"*. Finally, the four discursive struggles identified are described.

OASIS is preventable but still happens

An overarching and explicit presumption of the prevention and care related to OASIS shown throughout the documents was that OASIS is preventable. How the policy documents framed the problem emphasised that women giving birth were at risk of obtaining an OASI and skilled protective measures by the health care staff at childbirth were the prerequisite to avoiding an OASIS. Further, it was notable that skilled attendance of the birthing woman, especially during the second stage of labour, was regarded as harm minimisation, i.e. a tacit assumption that the occurrence of OASIS could be the result of providing suboptimal care. Thus, OASIS' occurrence was predominantly regarded and expressed as a "health staff problem", which was linked to the clinical skills of the staff. The presumptions of suboptimal skills were addressed by explicit instructions of what to do and sometimes even highlighted in bold text in the documents as part of the problem representation.

Based on the presuppositions that OASIS resulted from a "clinical skills' problem", the responsibility of the problem was dual – staff should provide preventive measures and act professionally. Consequently, the clinical organisation should provide instructions and educate its staff. Further, these presuppositions of responsibility for the problem were mirrored in the prognoses of what should be done. The three solution frames will be presented, followed by a presentation of the discursive struggles identified. Citations are shown in italics to illustrate the findings.

Enhanced education to improve staffs competence and skills

All 16 participating regions (irrespective of having guidelines or other documents) presented various educational elements for all healthcare professional groups. In most cases, lectures about anatomy, diagnostics, and suturing skills addressed midwives and obstetricians within the delivery wards and midwives in antenatal health care. Some regions also engaged their staff in workshops. All midwives in some regions were expected to pass the knowl-

Table 1
An overview of the characteristics of the responding and non-responding healthcare regions and regions with guidelines/programs in Sweden 2018.

	Total $n = 21$ health care regions [#]	Participating regions ($n = 16$)	Non-participating regions ($n = 5$)	Participating regions with guidelines or programs ($n = 9$)
No of birth clinics [#]	45 (100%) Median per region: 2 IQR: 1.5 Min-max: 1–6	37 (82.2%) Median per region: 2 IQR: 2 Min-max: 1–6	8 (17.8%) Median per region: 2 IQR: 1 Min-max: 1–2	20 (44.4%) Median per region: 1 IQR: 2.5 Min-max: 1 - 6
No of deliveries[#]	116 079 (100%) Min – max per region: 517 - 28 672	103 198 (89%) Median: 3382 IQR: 2360 Min – max per region: 517 - 28 672	12 773 (11%) Median: 2572 IQR: 959 Min – max per region: 1590 - 3039	65 825 (56.7%) Median: 2977 IQR: 9391 Min – max per region: 517 – 28 672
No of OASIS [#]	2452 (100%)	2198 (89.6%)	254 (10.4%)	1374 (56.0%)
Prevalence of OASIS (%)[#]	2.6% Min-max per region: 1.2 – 3.6%	Median: 2.45% IQR: 0.875 Min-max: 1.8–3.6%	Median: 2.7% IQR: 1.1 Min-max: 1.2 – 3.1%	Median: 2.3% IQR: 0.85 Min-max: 1.9 – 3.5%
Educational interventions regarding OASIS	–	Lectures, workshops, utilising online programs, practical training, and team training	–	
Implemented or ongoing implementation of pelvic floor teams	–	8 (50.0%)	–	
Implemented policies or guidelines	No national guidelines	9 (56.2%)*	–	

[#] Based on available statistics for pregnancies and deliveries in 2018, the National Board of health and welfare (in Swedish: Socialstyrelsen, Statistik om graviditeter, förlossningar och nyfödda).

* Three regions reported ongoing work. One region had only guidelines about suturing (these were not included in the analysis).

edge test available in the national online educational program. A few regions also allocated time for the midwives to go through the online educational program off-duty.

Also, the available documents stressed what measures should be taken, and in some documents, these measures were described in detailed and explicit ways. Such detailed instructions were often presented as bullet points in several of the analysed documents, as exemplified below:

"[Midwife should] Have a good visual overview of the perineum as possible".

"[Midwife should] With one hand against the child's head control the progress (a strong resistance is often needed) at the same time as steering the head upwards. The other hand protects the perineum by applying resistance over the perineum, possibly using a warm towel. If the woman's contractions are too strong, she shall be requested to pant.

Furthermore, the importance of skilled staff (in most cases, addressing the midwives as they are the predominant profession who assist the birth unless a complicated course of delivery) can be illustrated by this sentence which was presented in bold text:

The competence of the delivery staff and preventive measures must be considered with particular vigilance in women with known risk factors (for anal sphincter muscle injury).

Consequently, educational interventions directed to the health care professionals were regarded to improve the knowledge, skills, and competence to prevent OASIS. The responsibility of obtaining enhanced competency was mainly allocated to everyone. The birth clinics were responsible at an organisational level for providing education. In some regions, the staff was also explicitly expected to show their passed test results for the online education for the management.

Increased communication to minimise the risk of sustaining OASIS

The second framing focused on communication and how improved communication could prevent the occurrence of an OASIS. Failing communication could occur between the midwife and the woman giving birth and vice versa, i.e. neither midwife nor woman could make themselves understood. Several of the analysed documents stressed the importance of working communication between the midwife and the birthing woman during the second stage of labour.

"Good communication and collaboration with the mother is a postulate [for preventive measures]".

Good communication between team members was vital for preventing OASIS in complicated births. Further, communication with the woman and team members was primarily regarded as individual skill and liability, and second, the teams' liability. Contrasting the instructive, detailed, and explicit instructions on what skills and measures to use during birth, no recommendations or guidance on what characterised good communication or ideas of how good communication could be achieved were presented. Hence, communication skills were perceived as a tacit competence of the staff.

However, despite the emphasis on working dialogue, there were traces of explicit power dimensions between the staff and birthing women in some documents. For example, birthing women were expected to follow the staff's instructions during the second stage of labour.

"Good communication with the mother is a presumption [to prevent perineal lacerations]. Go through the prerequisites, how you want her [the mother] to listen to you and follow your instructions during the second stage".

Furthermore, several documents provided guidelines that restricted women's choices or limited their influence on birthing positions, especially in the case of previous large lacerations or if a larger child was expected. These restrictions also covered that the woman should be informed that staff's preventive measures for OASIS could be less effective if the woman chose or wanted other birthing positions than instructed by the staff.

"In case of previous larger laceration, shall woman not give birth in an upright position or on a seat. It is important that she is prepared for this already during pregnancy".

" In birth positions where perineal protection is made more difficult or impossible, for example, standing or sitting on a seat, the woman should be informed that this will limit staffs' preventive measures".

Thus, the individual birthing woman had little say or position to negotiate or influence her care despite the emphasis on communication and dialogue to prevent OASIS. The communication was predominantly described as staff providing instructions. Similarly, the midwives were in a position where the local guidelines explicitly dictated what information they should ensure the women received.

Improved teamwork could diminish the risk of OASIS

The third frame presented as a solution to the problem was improved teamwork. The documents often recommended that the staff support each other in the prevention, diagnostics, and repairs of all perineal lacerations. For example, it was suggested in some guidelines that two midwives should be present at birth and during the following diagnostics to aid and support each other's performance. Some guidelines further recommended that all women should have a rectal examination, irrespective of the degree of perineal laceration, as part of the midwifery assessment to ascertain whether an OASIS occurred. This recommendation could also be in bold text to further emphasise the recommendation.

"Two midwives [should be] present at childbirth."

"All women should be rectally examined."

The guidelines stressed the necessity of having clear team roles in case of complicated births, especially in vacuum delivery, but with no or few suggestions about how to obtain effective teamwork. A few guidelines recommended that the responsibility of perineal protection should be decided beforehand between professionals. Hence, it was unclear who was responsible for securing good teamwork, but obstetricians were expected to lead in complicated cases according to the medical hierarchy and professional competence.

"Specific preventive measures: … clear communication about team roles, especially in case of instrumental delivery"

Discursive struggles

During the analysis, four discursive struggles were identified, and these struggles are presented as follows.

Professional power dimension between midwives and obstetricians

Despite the focus on preventing OASIS, there was a notable power dimension in who was responsible for developing the regional and local guidelines. Midwives independently manage and care for most vaginal births in Sweden. Still, representatives of the midwifery profession were mentioned as members of the guideline development team in two of the nine regions with regional or local documents on OASIS, which exemplified the professional hierarchy in the delivery room where obstetricians predominantly

determined actions to prevent OASIS, and midwives were expected to follow the explicit guidelines.

Lack of consensus on what is a potential risk factor for OASIS

The second discursive struggle addressed potential risk factors of sustaining OASIS. However, the guidelines did not present concordant risk factors. Instead, a wide range of potential risk factors was mentioned, from presenting no risk factors to numerous factors. For example, one guideline showed second-stage labour exceeding 30 min and birth weight > 4500 gs as risk factors for OASIS. Another policy stated birth weight > 4000 gs and second-stage labour> 60 min as risk factors. Other significant differences in stated risk factors addressed the ethnic origin of the mother (being Asian or genital mutilated), shoulder dystocia, and episiotomy, which was regarded as a risk factor and recommended as a protective measure.

Lack of consensus on what preventive measures to take

Most documents agreed that midwives should apply warm moist towels to the perineum during the second-stage labour and provide manual perineal support. Some records had explicit recommendations on how to deliver the babies, while other guidelines lacked such information. Other topics where diverging recommendations were identified were how to provide anaesthesia before examining the extent of the laceration. Some guidelines commented that Ritgens' manoeuvre should not be applied due to a lack of evidence of its preventive measure.

No consensus on what scientific evidence is used for the guidelines

Finally, the fourth discursive struggle addressed the scientific evidence of the analysed documents. About half of the documents showed no scientific evidence or used any references to support the guidelines. Further, those regional or local guidelines that had included any scientific evidence or other references covered a range of sources, from using another region's guidelines for their recommendations to extensive scientific reference lists supporting the guidelines.

Discussion

During the analysis of the collected documents, we found that OASIS was regarded as a preventable problem and three main frames of solutions to the problem, education, communication, and teamwork, were vital to minimise the prevalence of OASIS. However, power dimensions between professionals and birthing women were identified. Further, several discursive struggles were found, predominantly regarding the scientific evidence for the suggested prevention and care.

In the planning of the study, we argued that how guidelines and care programs are articulated have consequences for implementing OASIS care into healthcare services. Differing views on the prevention and treatment of OASIS might exist due to regional sovereignty, as shown in our findings. Only nine of the responding 16 regions had developed clinical guidelines for the prevention and care of OASIS. Clinical practice guidelines are designed to assist and aid decision-making and the formation of health policies, but guidelines are only as helpful as the guideline's quality. The AGREE II instrument is developed for rigour and transparency assessments of clinical guidelines and offers guidance for ratings of six items and an overall assessment. Additionally, the instrument enables a methodological strategy for guideline development and aids in how and what information should be included (AGREE Advancing the science of practice guidelines, 2017). As previously mentioned, studies have used the AGREE II instrument to assess the quality of available national guidelines for the management of obstetric perineal lacerations or specifically OASIS (Nygaard et al., 2020; Roper et al., 2020). Both studies included other forms or guidelines, and the included countries differed between studies and agreed on finding the highly varying quality of the included guidelines. A third paper presents a descriptive evaluation of three national guidelines without applying the AGREE II instrument (Tsakiridis et al., 2018). Thus, these findings indicate that the methodological quality of national guidelines may differ considerably, which is in line with the discursive struggle of scientific evidence identified by applying a critical frame analysis in our study.

Furthermore, there may be gaps between providing clinical guidelines and how they are used in clinical practice. For example, a study of UK midwives shows poor compliance with evidence regarding the management of perineal trauma; i.e. the clinical practice of management of perineal trauma did not reflect the evidence-based guidelines (Bick et al., 2012). Other recent studies also show low staff compliance with other obstetric clinical guidelines. Some examples include screening for Group B Streptococcus (Pangerl et al., 2021), prevention of preterm birth (Rousseau et al., 2020), and Rhesus immunisation (Jourdren et al., 2021); i.e. there are identified gaps between clinical guidelines and practice which may contribute to suboptimal care of pregnant and birthing women.

Our findings showed that all responding regions had allocated resources to different educational interventions for preventing and caring for OASIS. In addition, some birth clinics also required the midwives to pass a mandatory online test. Nevertheless, one might question if educational interventions are the solution to reduce OASIS occurrence and does more knowledge reduce the incidence of severe perineal traumas? Formal prevention programs (educational and practical training) have shown no further reduction in the incidence of OASIS than general awareness of OASIS prevention, indicating that other interventions may be needed to decrease the incidence of OASIS further (Jangö et al., 2019). However, others show an increase in the detection of OASIS after hands-on workshops (Ginath et al., 2020). Furthermore, staff and students' knowledge improvements after training on perineal repairs are reported (Diaz et al., 2021; Zimmo et al., 2017). Additionally, more experienced midwives have lower rates of severe perineal lacerations (Mizrachi et al., 2017). Hence, professional support for skills development is essential for midwives with little experience, but preceptorship programs are often scarce (Hunter and Bick, 2019).

Ensuring good communication was the second solution frame preventing OASIS found in our study. Communication of good quality and respectful relationships between the birthing woman and the attending health care professionals is a foundation for positive childbirth experiences. Effective communication is a recommended care option by the WHO, and communication is also an essential aspect of the concept of Respectful Maternity Care (RMC). Women want to be informed about needed interventions and, if possible, have a choice (World Health Organisation, 2018). There is no definition of effective communication, but the WHO presents several aspects that characterise effective communication at a minimum standard. One of these aspects is *"supporting the woman to understand that she has a choice and ensuring that her choices are supported"* (World Health Organisation, 2018). Further, the Swedish Patient Act (The Government of Sweden, 2014) prescribes that the patient's integrity, autonomy, and participation should be respected. Additionally, as far as possible, all care shall be designed and implemented in consultation with the patient. Thus, it is noteworthy that we found explicit recommendations about restricting women's choices and directing information that midwives should ensure that women followed their instructions in our analysis.

The third frame found in our CFA approach was improved teamwork to prevent OASIS. It is well-known that communication and teamwork are critical aspects of patient safety. Despite lim-

ited evidence, there are indications that teamwork interventions in simulation-based settings improve team performance (Wu et al., 2020) and patient outcomes (Goldshtein et al., 2020). In Sweden, there is a growing clinical practice of two midwives being present during the second stage of labour. This clinical practice reduces severe perineal trauma amongst first-time mothers in a recently presented RCT study (Edqvist et al., 2022).

Methodological considerations

There are some limitations to this study. First, there were no national guidelines on how to prevent OASIS or manage treatment and care when an OASIS occur, thus the urge to explore regional and local policies as they might differ due to the sovereignty of the regions. Second, not all regions responded to our questions about educational interventions and requests for present guidelines despite repeated efforts, limiting the national data coverage. However, the non-responding regions may not have any clinical guidelines, or the development of guidelines was ongoing; thus, no response or documents under development were obtained. Third, a CFA methodology was applied for this study as it is developed to reveal and explore the representations offered about policy problems and their solutions (Verloo, 2005); hence suitable when exploring the representations of OASIS and related solutions to the problem as presented in regional and local guidelines. CFA has previously been applied to research exploring gendered inequalities in society, such as motherhood and work and domestic violence (Verloo, 2007), as well as in feminist research (van der Haar and Verloo, 2016).

The strength of this study was that the same analytical questions were posed to all documents, followed by a constant comparison of the emerging findings. The findings were also discussed repeatedly to reach a consensus. It may be a strength, or a weakness, that this first-time critical frame analysis has been applied to clinical guidelines to our best knowledge. However, a recent study (De Vito et al., 2022) focuses on the quality and clinical heterogenicity of clinical guidelines on nutrition in pregnancy and assessed by the AGREE II tool show significant heterogenicity between aspects of nutritional recommendations, i.e., like the heterogenicity in potential causes of OASIS we found in our study. Hence, CFA may be suitable and complement the methodological assessment obtained by AGREE II instrument by further exploring the underlying beliefs and perceptions about the topic of investigation. Using a qualitative approach, such as CFA, combined with the quantitative AGREE II instrument may improve quality and rigour when national, regional, and local guidelines are developed. In the long run, such mixed methodologies may provide more precise guidelines, improving care and the applicability of guidelines in clinical practice.

Conclusion

We found that how the policy documents framed the problem emphasised that OASIS is preventable. All women giving birth were at risk of obtaining an OASI and could be protected by skilled protective measures by the health care staff. The suggested solutions to address the problem covered education, communication, and teamwork. Further, power dimensions and discursive struggles were also identified. There are methodological instruments available to assess the quality of clinical guidelines. However, this study highlights the importance of exploring how healthcare services understand a problem and how its causes, consequences, and interventions are described. This may be especially important in societal contexts where regions have the sovereignty to develop their own regional and local clinical guidelines for birth clinics. There is an urgent need to develop comprehensive national guidelines of high quality for the prevention and care of OASIS so that all women giving birth have access to equal care and treatment in Sweden.

Ethical approval

There was no need for ethical approval for this study as no material of individuals was collected. However, according to the Helsinki declaration, ethical considerations and cautions regarding research ethics were applied to the study.

Declaration of Competing Interest

The authors declare they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

CRediT authorship contribution statement

Margareta Persson: Conceptualization, Methodology, Data curation, Investigation, Writing – original draft, Writing – review & editing. **Inger Lindberg:** Conceptualization, Methodology, Validation, Writing – review & editing. **Ann Öhman:** Conceptualization, Methodology, Validation, Writing – review & editing.

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