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Review Article

Women's experience of obstetric anal sphincter injury following childbirth: An integrated review.

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ABSTRACT

Background: Perineal injury during childbirth is a very common event which affect women during childbirth. Significant morbidities are associated with third-and-fourth degree perineal tears in particular, also referred to as obstetric anal sphincter injuries (OASIS). With an increasing global birth rate and rising interventions in birth, the incidence of perineal trauma following vaginal birth is increasing on an international scale, impacted also by more accurate classification and definitions of OASIS and increased pre-existing co morbidities amongst affected women. The consequences of OASIS can be physically and psychologically distressing for affected women and have significant impact on quality of life.

Methodology: The aim of this integrative review was to examine women's experience of OASIS following childbirth using a systematic approach. This is presented in a five-stage process that includes problem identification, literature search, data extraction and evaluation, data analysis and presentation of results. A number of academic electronic databases were systematically searched and results are presented and analysed. Results of the complete search are presented in PRISMA format. Eight papers, which were assessed for quality using an appropriate appraisal tool, are included in the review and thematic analysis used to identify themes.

Findings: The themes identified were; psychological consequences, the role of the health care professionals and implications for future pregnancies. Psychological consequences included anxiety, loneliness, isolation, shame, fear, many of which were associated with physical ramifications of OASIS and how these feelings affect activities of daily living. The importance of access to and support from health care professionals was highlighted. The impact the experience of OASIS had on women's decisions about future pregnancies was also evident.

Conclusion: The association between OASIS and maternal quality of life following childbirth can be substantial as evidenced by this literature review. The review identifies the need for improvement in the care and management of these women to alleviate the physical and psychological consequences of OASIS, including decisions in relation to future pregnancies and childbirth. Health care professionals caring for women in pregnancy and childbirth need to be educated and informed on the sequelae of OASIS, to ensure appropriate information and support is provided to these women and their families. Such knowledge may enable health care professionals to alleviate symptoms associated with OASIS and help women make sense and cope with their experiences.

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Introduction

Perineal injury during childbirth is a very common event which affects women during childbirth (East et al., 2012). It can occur spontaneously or as a result of obstetric interventions during vaginal birth (Fernando et al., 2013). Perineal injuries are classified from first to fourth degree, depending on the anatomical structures involved in the tissue damage (Royal College of Obstetricians and Gynaecologists (RCOG) 2015). First degree tears involve damage to the perineal skin that will heal naturally and do not usually require suturing. Second degree tears involve the muscle of the perineum as well as the skin. Third- degree tears involve the anal

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sphincter complex and fourth degree tears also affect the anal mucosa. Third-and-fourth degree tears are referred to as severe perineal trauma (Wilson 2017) but are also classified as obstetric anal sphincter injuries (OASIS) (RCOG 2015).

With an increasing global birth rate and rising interventions in birth, the incidence of OASIS following vaginal birth is reported to be increasing on an international scale (Dahlen et al., 2013). The increase can be attributed to factors as identified by Lone et al. (2012) who notes that a result of a universal classification for OASIS in practice has reduced under reporting of OASIS, whilst the pre-existing co morbidities amongst women such as obesity increases the risk of OASIS. The increase in reporting of OASIS identified by Dahlen et al. (2013) indicated the rate of perineal trauma in New South Wales (NSW), Australia had increased by 36% between 2000 and 2008 with much of this increase associated with third-degree tears.

Similarities are reported in other countries where universal classification for OASIS are utilised in practice. For example, the overall incidence of 3rd and 4th degree perineal tears in Ireland is reported as 0.4 - 2.7% (Irish Maternity Indicator System (IMIS), 2018) reflecting an increased trend with a reported rate of OASIS (3rd and 4th degree tears) of 19.2 per 1000 vaginal deliveries in 2014 and 19.6 per 1000 vaginal births in 2015 (IMIS, 2018). In the United Kingdom (UK), the incidence of OASIS is 2.9% of all vaginal births (Thiagamoorthy et al., 2014) reflecting an increase of OASIS rising from 1.8% in 2000 to 5.9% in 2012 (Gurol-Urganci et al., 2013; RCOG. 2015).

When a woman experiences OASIS following childbirth, an increasingly stressful and complex period ensues (Brown and Lumley 1998; Lee and Gramotnev 2007) with pain and infection contributing to short and long-term morbidity for these women (Bick et al., 2012). Depending on the degree of perineal trauma, it can cause complications such as pain (Andrews et al., 2008), urinary and faecal incontinence (LaCross et al., 2015), sexual dysfunction (Samarasekera et al., 2008; Marsh et al., 2011), anxiety and depression (Desseauve et al., 2016) and can affect a woman's emotional health and day-to-day quality of life (RCOG 2015). These issues can have a negative impact on women's physical, mental and social wellbeing (Tucker et al., 2014) and can negatively affect maternal relationships with their infant, partner and family members (RCOG 2015).

It is important as midwives to be aware of the consequences of OASIS and the impact it can have on a woman's well-being. Evidence based practice to prevent or minimise perineal trauma, in particular OASIS at birth must be utilised in partnership with all women. Such practices can include antenatal preparation for example perineal massage at 34 to 41 weeks" gestation (Beckmann et al. 2013), the use of warm compresses on the perineum during the second stage of labour (RCOG 2015) and the importance of continued physical and verbal support for the labouring woman (Dahlen 2015). Having an awareness and insight into women's experience of perineal trauma will enhance midwifery practice, raise awareness of the importance of assessment and diagnosis of OASIS at time of birth (NICE 2014) and facilitate empathetic and sensitive care provision to those women affected including acknowledgement of how OASIS may impact on daily living activities.

The focus of this literature review is to assess the literature available on the topic of women's experience of OASIS following childbirth. An earlier review by Priddis et al. (2012) which considered women's experience of OASIS, identified the need for further research to be conducted into this area, specifically how OASIS affects women in their role as a woman and a partner. The recent rise in the incidence of OASIS globally is a further impetus to update the literature review to enhance care provision for those women and their families.

Methodology

This integrated literature review was conducted using a systematic approach to integrative reviews devised by Cooper (1998) subsequently updated by Whittemore and Knafl (2005). According to Cronin at al. (2008), the goal of a literature review is to bring the reader up to date with current literature on a topic, strengthen evidence-based practice and identify the need for further research This review sought to understand the experiences of women with OASIS following childbirth. The method used for this integrated review are presented in a five-stage process which included problem identification, literature search, data extraction and evaluation, data analysis and presentation of results.

For this integrated review, the PEO (Population-Outcome-Exposure) tool as recommended by Bettany-Saltikov (2012) was used to formulate the research question. The search terms developed through the use of this tool are presented in Table 1

A search of electronic databases commenced in January 2019. Electronic databases utilised were: EBSCO (Academic Search Complete, Medline, Cinahl and Social Sciences Full Text), the Cochrane library and EMBASE (Excerpta Medica database). The Boolean method was applied during each search as recommended by Wakefield (2014). Table 2 identifies the inclusion/exclusion criteria that were used to set the boundaries of this review. McKenzie et al. (2019) suggest that unambiguous inclusion criteria which are defined pre review are essential and be broad enough to include a diversity of studies, but narrow enough to ensure a meaningful answer to the research question. The search dates were confined to research published from 2012 onwards to avoid duplication of Priddis et al's. (2012) earlier meta-ethnographic synthesis and to identify any relevant research on women's experiences of OASIS since that review. Only published research studies relevant to the review question were included which were peer reviewed pre-publication to ensure optimum quality of the research. Limited resources and time constraints dictated that studies published in English only were included. An ancestry search of the reference lists of included studies was also carried out to ensure an extensive and comprehensive search as advised by Whittemore & Knafl (2005).

The results of the complete search are presented using the preferred reporting items for systematic reviews and meta analyses (PRISMA) format as devised by Moher et al. (2009) (Fig 1). The first author (E.D) conducted database searches identifying 102 studies initially and 15 studies identified via ancestry search (n = 117),

Table 1
PEO tool for Question Formulation.

Population	Women who have experienced OASIS during childbirth
Exposure	Experience of OASIS
Outcomes	Consequences of OASIS

Table 2
Inclusion/Exclusion Criteria.

Inclusion Criteria

- Studies published between 2012- 2019
- All studies involving women's experience of OASIS
- Studies written in English
- Peer Reviewed primary research

Exclusion Criteria

- Studies published pre 2012
- Research relevant to OASIS but not reflective of the experiences of women
- Published in a language other than English
- Non peer reviewed studies/secondary research

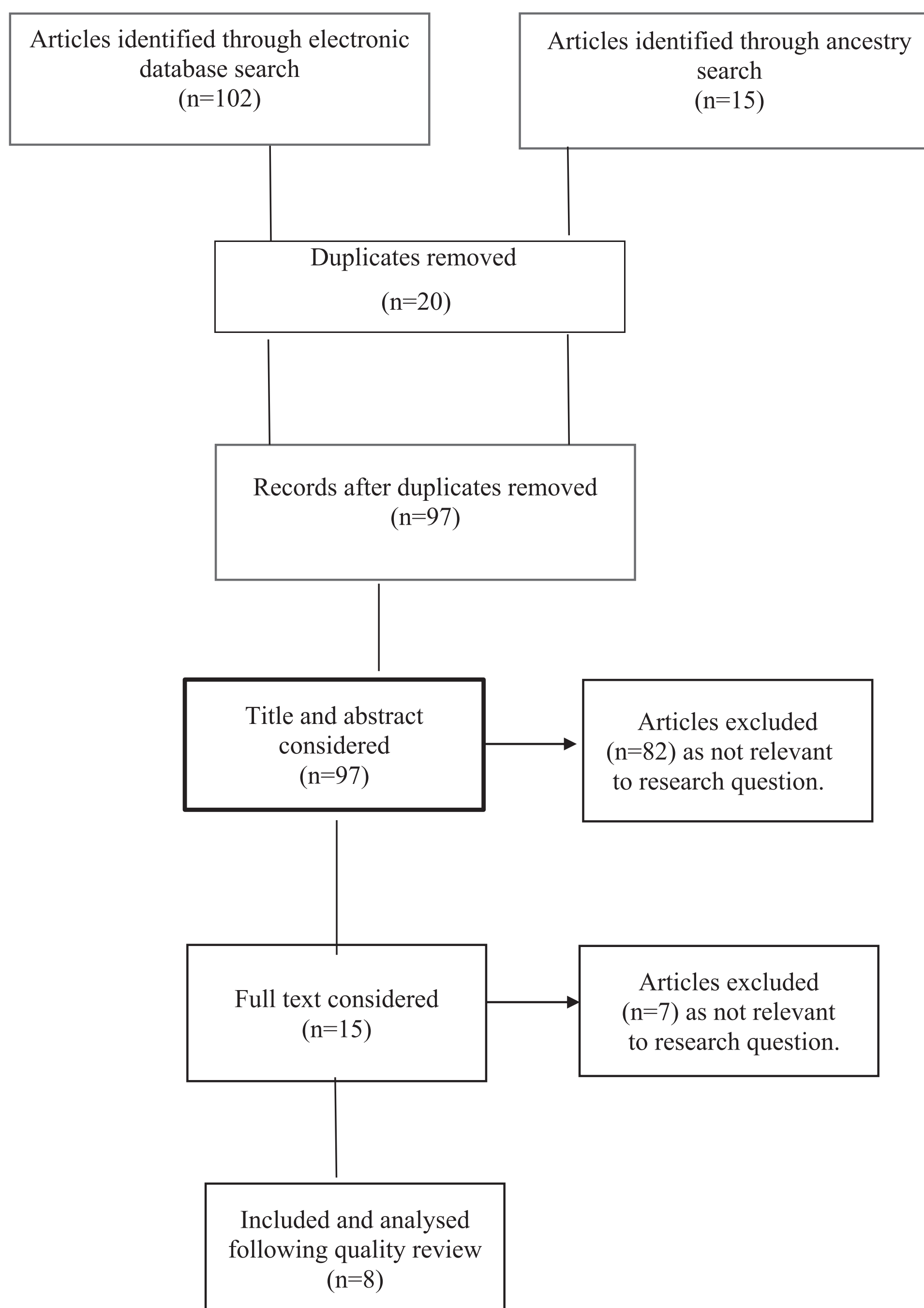

Fig. 1. PRISMA flow diagram of search results.

with 97 studies remaining following exclusion of duplicates. A review of the title and abstracts of the remaining studies excluded 82 which did not address the research question. The remaining 15 studies were subject to full text review and 8 studies were deemed to meet the search criteria. The quality of the search was enhanced by the involvement of the co-author (C.B), who also provided consultation around the analysis and interpretation of findings.

Data extraction, quality assessment and analysis

All research papers included in the review were assessed for quality using the Critical Appraisal Skills Programme (CASP) tool (CASP 2013) which helped demonstrate the trustworthiness and relevance of the studies (Wakefield 2014). All eight articles met the quality requirements for inclusion in the review scoring 10/10 in the review checklist.

A four-step thematic analysis outlined by Lucas et al. (2007) was used to guide the analysis of the articles in this review. The initial steps in this process were an in-depth reading of the selected studies and the formulation of a data extraction table. This facilitated the identification of emerging themes which, resulted in the generation of themes relevant to this review. Thematic analysis was chosen as it allows one to draw conclusions across heterogeneous studies (Lucas et al., 2007). Following thematic analysis of the literature, three themes were identified by the first author (Initials) and agreed by co-authors (Initials) which were: the psychological consequences of OASIS,

the role of the healthcare professionals and implications for future pregnancies.

The results of this integrated literature review are presented in a data extraction table (Table 3) which summarises the research design, research setting, the findings of the research and themes identified from each study.

Findings

Six of the eight studies reviewed are qualitative and two utilised a quantitative design (Iles et al., 2017; Evans et al., 2019). A qualitative design is most apt when describing life experiences and giving them meaning (Nieswiadomy 2011). The use of a quantitative design by Illes et al. (2017) and Evans et al. (2019) to elicit women's experiences of OASIS impacted on the richness of the data and may have precluded women from identifying other related issues. However, the findings from these studies are similar to the findings of the qualitative research and add depth to the current data surrounding body image and OASIS. Sample sizes varied from 10 women (Tucker et al., 2014) to 1248 women (Lindqvist et al., 2018b). The studies emanated from Sweden, Australia and the UK. The majority of the participants were Caucasian women. Seven of the reviewed articles considered the short-term consequences of OASIS (<1 year) with the exception of Evans et al. (2019) who researched the longer term impact of OASIS for women (1–6 years).

The themes identified were; the psychological consequences of OASIS, the role of the healthcare professionals and implications for future pregnancies. These themes were identified by examining the findings of each study and extracting commonalities that reflected women's experience of OASIS. The first theme, psychological consequences was identified in all eight studies reviewed and incorporated reference to the social implications of having sustained an OASIS. Emotional needs included anxiety, loneliness, isolation, shame, fear and how these feelings impacted negatively on women's daily lives and routines. The second theme was the role of health care professionals' in the care of women affected by OASIS; this was identified in five of the articles reviewed. (Lindqvist et al., 2018a; Tucker et al., 2014, Keighley et al. 2014, Lindqvist et al., 2018b, Evans et al., 2019). Support from health care professionals was often sporadic amongst women suffering from OASIS which contributed to their anxiety and stress. The need for and access to appropriate services and follow up care was highlighted by these women. The final theme identified was the impact that OASIS had on women's decision making around future births and family planning (Tucker et al., 2014; Evans et al., 2019; Elden et al., 2015; Iles et al., 2017; Lindqvist et al., 2018a) with the experience of OASIS having a marked effect on these women's decisions in relation to future childbirth.

Discussion

Psychological consequences of OASIS

This review has emphasised the complex emotional experiences of women who have sustained OASIS post childbirth and the effect these emotions can have on their quality of life, evidenced in all of the studies reviewed.

One of the biggest challenges amongst women was the effects OASIS had on sexual intercourse following the birth of their babies. Issues articulated in this review included; reduced interest in intimacy and grief over the loss of functional sex with their partner (Elden et al., 2015), pain associated with sexual intercourse and change to their genital anatomy (Lindqvist et al., 2018a and b) and anxiety and fear surrounding future intimate relationships (Tucker et al., 2014). These findings were also supported by O'Shea et al. (2018) which describe the long-term (45 months +/- 8 months) effects on sexual function and satisfaction amongst women who previously sustained OASIS and their male partners. A total of 47 women and 25 male partners participated in the study. Results show that nearly half of the women and 7 male partners met the criteria for sexual dysfunction and identified problems mostly related to desire, arousal, infrequency of intercourse, non-communication and avoidance. Furthermore, Desseauve et al. (2016) carried out a study in France evaluating women's' pelvic floor symptoms one year after OASIS. Painful intercourse was reported by 11% (n = 17) of women in this study. The link between pain and postponing sexual intercourse was further highlighted by Fodstad et al. (2016), noting that pain following OASIS was the strongest predictor of women postponing sexual activity more than 8 weeks post childbirth and reporting dyspareunia at one-year post childbirth. This is further supported by Andreucci et al. (2015) in a systematic review who found that women with OASIS resume sexual activity much later in comparison to women without this morbidity.

Fear surrounding sexual intercourse was discussed frequently by the women in this review. Priddis et al. (2014) identified that women were not only fearful of the pain they may experience due to changes to their genital anatomy but women were also fearful of a subsequent pregnancy, having to give birth again with potential for further genital trauma. Women's fear of unexpected incontinence also disrupted the spontaneity of intercourse and therefore intercourse became scheduled around toileting times to ensure cleanliness (Priddis et al. (2014)

Women in the reviewed studies also discussed the psychological effect of unexpected incontinence associated with OASIS and the shame and isolation women experienced as a result of this (Priddis et al., 2014; Lindqvist et al., 2018b). In addition, earlier studies by Ramussen and Ringsberg (2010) and Wilson (2007) described the disruption to the daily lives of women following OASIS, which included diversionary tactics, alteration to diet, clothing and self-imposed exclusion from public areas due to the unpredictable nature of incontinence. Keighley et al. (2016) discusses how coping with the symptoms of OASIS involves repetitive washing, which may become a ritual, planning daily activities for example employment and attention to the baby around toiletry needs. Priddis et al. (2012) in an earlier review describes how women often used the word 'embarrassed' to describe how they felt about the symptoms they experienced following OASIS. Keighley et al. (2016) and Priddis et al. (2012) also highlight a 'hidden taboo' where women described hiding their condition for reasons including shame, bad memories and dignity loss. These feelings led to social isolation which some women referred to as being like a prisoner in their own homes. For these women, having someone to talk to, was an important factor on the road to recovery and family and close friends who were understanding and sympathetic facilitated the healing process. Women also identified the baby as being an important focus for recovery (Keighley et al., 2016).

Findings also identified that OASIS impacted on a woman's perceived body image which resulted in women feeling less attractive and having low self-esteem (Illes et al. 2017; Lindqvist et al., 2018a). Physical changes and symptoms associated with OASIS resulted in many women finding it difficult to accept their 'new body' which consequently affected their self-esteem and self-image (Illes et al., 2017; Lindqvist et al., 2018a; Priddis et al., 2014). It is acknowledged that body image may be an issue for many women following childbirth but Illes et al. (2017) found that it was rarely assessed or addressed after OASIS. Priority is given to the assessment of other symptoms such as bowel and urinary incontinence and education regarding pelvic floor exercises. This review high-

Table 3
Data Extraction Table.

Author Year Setting	Title	Participants	Aim	Type of Study	Findings	Potential Themes
Lindqvist et al., 2018a Sweden	'Struggling to settle with a damaged body' – A Swedish qualitative study of women's experience one year after obstetric anal sphincter muscle injury (OASIS) at childbirth.	625 women who had sustained OASIS during childbirth.	To explore women's experience 2 months after OASIS with a focus on problematic recovery.	Qualitative study using inductive qualitative content analysis. .	Extensive pain resulted in physical and psychological limitations and crushed expectations of family life. Improved information for people with OASIS is needed in relation to psychological and physical aspects of OASIS.	Physical and Psychological Concerns. Improved education in relation to OASIS.
Tucker et al., 2014 Australia	Teetering near the edge; women's experiences of anal incontinence following obstetric anal sphincter injury: an interpretive phenomenological research study.	10 women with a history of OASIS and anal incontinence (9 Caucasian women and 1 African woman)	To describe and interpret women's experience of anal incontinence following OASIS.	Qualitative study using an interpretive phenomeno-logical approach.	Emotional impact of OASIS including grief, anxiety, shame, sadness and hopelessness. Health professionals need a better understanding of the impact of OASIS on women's health. Fear around future family planning	Emotional Reaction to OASIS. Role of health care professionals. Worries of future childbirth after OASIS.
Iles et al., 2017 UK	The impact of anal sphincter injury on perceived body image.	422 women who sustained anal sphincter injury between the years 1999- 2012.	To explore patient perceived changes in body image and psychological issues in women following OASIS.	A retrospective quantitative study.	Change in body image after anal sphincter injury. The psychosocial problems of negative self-esteem and personality changes associated with a change in body image for affected women are highlighted.	Impact of OASIS on body image. Psychosocial changes as a result of changes in body image.
Elden et al., 2015 Sweden	Feeling old in a young body: Women's experiences of living with severe consequences of an obstetric anal sphincter rupture: An interview study.	20 women (19 Caucasian women and one Indian woman)	To describe experiences of living with on-going severe consequences of an OASIS > 8 weeks after childbirth.	Qualitative study using inductive qualitative content analysis..	4 themes emerged; Isolation. Inability to function sexually. Anxiety about the future and future pregnancies. Seeing their body as injured.	Social, psychological and physical problems following OASIS. Worries of future childbirth after OASIS.
Lindqvist et al., 2018b Sweden	'A worse nightmare than expected' – A Swedish qualitative study of women's experiences two months after obstetric and sphincter muscle injury.	1248 women from the national Perineal Laceration Register (PLR)	Explores women's experience of the first two months after OASIS during childbirth with a focus on problematic recovery.	Qualitative study using inductive qualitative content analysis.	Some of the key themes that emerged were: Facing daily physical and psychological limitations. Living with crushed expectations. Difficulty navigating the healthcare system.	Physical and Psychological problems following OASIS. Role of health care professionals.
Priddis et al., 2014 Australia	Women's experience following severe perineal trauma: a qualitative study.	12 women who had experienced severe perineal trauma during vaginal birth.	To explore how women experience and make meaning of living with severe perineal trauma.	A qualitative interpretive study using an ethnographic approach with a feminist perspective.	3 main themes were identified. 'The abandoned mother' describes how women feel vulnerable, exposed and disempowered. 'The fractured fairy-tale' explores the disconnect between the expectations and reality of the birth experience. 'A completely different normal' discusses the emotional pathway women travel as they work to redefine a new sense of self following severe perineal trauma	Emotional, psychological and physical consequences following OASIS.

(continued on next page)

Table 3 (*continued*)

Author Year Setting	Title	Participants	Aim	Type of Study	Findings	Potential Themes
Keighley et al., 2016 UK	The social, psychological, emotional morbidity and adjustment techniques for women with anal incontinence following Obstetric Anal Sphincter Injury: use of a word picture to identify a hidden syndrome.	A cohort of 81, 50 of these women lived in the UK, 8 of these were Asian and 31 lived in Ireland.	To describe the emotional, social and psychological consequences of anal injury (AI) after OASIS and the coping strategies which lead to recovery.	A qualitative study using a narrative approach.	'OASIS Syndrome' which was described in a 'word picture" in which the size of the words represents the emotional force of expression. Women felt unclean which resulted in dignity loss, isolation, embarrassment, guilt, fear, grief, feeling low and loss of confidence. Coping skills include repetitive washing, planning daily activities around toiletry needs, Recovery is through care of the child and love within the family.	Emotional Impact of OASIS.
Evans et al., 2019 Australia	What is the total impact of obstetric and anal sphincter injury? An Australian retrospective study	210 women who had experienced OASIS 1–6 years ago.	This study aimed to collate the extent of medium-term symptomology (1–6) years and observe the effects on future births choices to examine the cumulative impact of OASIS in affected women.	A quantitative retrospective cohort study.	Social Impact: Delayed return to work, exercise restrictions, social limitations, relationship and family breakdown. Physical Impact: anal incontinence, faecal urgency, dyspareunia, prolonged postpartum recovery, pain and discomfort. Psychological Impact: distress of ongoing symptoms, effects on mental health, implications for intimacy and embarrassment. Healthcare Impact: Delay or avoidance of future births, surgical birth for future births, increased length of stay, risk of infections and complications, ongoing treatment and support and secondary repair.	Social. Psychological and physical impact of OASIS. Role of health care professionals. Future pregnancies.

lights however that recognition of psychosocial issues is as important as physical issues and are inextricably linked.

The role of health care professionals

A recurring theme identified from the literature review was women's dissatisfaction with health care professionals and subsequent follow up care in relation to OASIS (Tucker et al., 2014; Lindqvist et al., 2018a and 2018b; Keighley et al., 2016). According to the Royal College of Midwives (2012) details of perineal trauma sustained, including information on the type of repair and where the wound is sited, should be discussed with the woman in the postnatal period, enabling the woman to more effectively manage and monitor her own recovery. However, many women noted in this review that there was insufficient information about how best to care for themselves after OASIS and a lack of follow up from professionals. Avoiding discussion, providing limited or inadequate information and failure to link women to adequate services following OASIS were some of the deficiencies in health care provision identified by Tucker et al. (2014). Furthermore, the silence of health care professionals reinforced the stigma, shame and isolation women endured (Tucker et al., 2014).

Lack of accessibility to appropriate support from health care professionals contributed to disappointment and lack of trust in health services (Lindqvist et al., 2018a). O'Reilly et al. (2009) similarly describes how women felt devalued and dismissed when reporting their postpartum recovery concerns to health care professionals. Rasmussen and Ringsberg (2010) found that women felt that not being taken seriously by their health care professional was humiliating and under-mined their self-esteem. Previous studies, such as Salmon (1999), highlighted that women's symptoms of urinary and faecal incontinence were frequently dismissed as 'normal' following childbirth. Unfortunately, studies continue to report that the majority of women are not asked about urinary incontinence or sexual health problems by healthcare professionals (Daly et al., 2018 and O'Malley et al. 2018). These studies highlight the importance of interpersonal skills and that listening to women is key to responsive care. The reinforcement of negative societal constructs

around symptoms following OASIS often resulted in women not speaking about their experiences, accentuates the 'hidden taboo' reported by Keighley et al. (2016).

The findings of this review provide compelling arguments for providing women with early and appropriate information and advice in the management of perineal care particularly those with OASIS. This would enable prompt referral of women for early investigation, assessment, support and treatment. Glazener et al. (2013) argues that if a woman has an identified injury that is repaired at the birth of their baby, they should have the benefit of a multidisciplinary postnatal clinic so that early advice and support can be provided long-term. In this review, Priddis et al. (2014) described a 'patchwork' of service provision for women who have sustained OASIS and only four of the twelve women interviewed described health care professionals as supportive and informative. The importance of empathy and support of health care professionals was also highlighted by Lindqvist et al.'s (2018a) study where women expressed a great sense of relief when the professional was compassionate and understanding and had a positive attitude.

Priddis et al. (2014) supports Glazener et al. (2013) on the benefits of establishing multi-disciplinary clinics to provide physiological and psychological support to women who experience OASIS and associated morbidities. When such support and advice were available, this appeared to alleviate the distress women with OASIS experienced (Williams et al., 2005)

Implications for future pregnancies

Significantly higher numbers of women following OASIS reported concern surrounding future births, in comparison to women who have not experienced OASIS (Iles et al., 2017; Tucker et al., 2014; Elden et al., 2015; Lindqvist et al., 2018a: Evans et al., 2019) emphasising the importance of correct diagnosis and planning for subsequent births for affected women. The issues identified included; feeling frightened when contemplating another vaginal birth with a preference for a caesarean section (Iles et al., 2017). Women also expressed fear of sustaining the same injury again, or that the existing symptoms could worsen (Elden et al., 2015). Women felt their choices in relation to having future children were very limited following their experience of OASIS. Choosing not to have more children, adoption or caesarean section were the only options considered by some women (Elden et al., 2015; Lindqvist et al., 2018a) as a result of the trauma sustained in their previous births. Evans et al. (2019) found that women with an OASIS were significantly more likely to choose privately funded, obstetrically led care for future births, perhaps reflecting women's desire to have more control over mode of birth in subsequent births, as well as seeking a model of continuous care with a known health provider. Lyberg and Severinsson (2010) similarly reported persistent memories of a traumatic childbirth causing feelings of confusion, anxiety and fear amongst women in relation to future pregnancies. The presence of symptoms is likely to have an effect on decision making, with caesarean section often being offered to symptomatic women with a previous grade 3 or 4 tear and for asymptomatic grade 4 tears (Evans et al., 2019). This is congruent with the RCOG (2015) guidelines who suggest that all women who have sustained a previous OASIS should be counselled regarding the option of elective caesarean birth.

The rate of OASIS recurrence is highlighted by Ampt et al. (2015) who researched women who had sustained OASIS at first birth and proceeded to a subsequent second birth in Australia between 2001 – 2011. Of 6380 women who had sustained an OASIS with a first birth who proceeded to a subsequent birth, 75.4% had a vaginal second birth, 19.4% a pre labour caesarean, and 5.2% an intrapartum caesarean. The recurrence rate of OASIS at 5.7% was significantly higher than the first birth OASIS rate of 4.5%. A fourth-degree tear at the first birth was the strongest factor associated with planned caesarean at the second birth. The recurrence rate in this study of 5.4% sits within the range of 2% to 13.4% found in other studies (Yogev et al., 2014; Edozien et al., 2014; Antonakou et al., 2017). The RCOG (2015) acknowledge that the wide range of results from these studies demonstrate the complexity of counselling women approaching a second birth following experience of OASIS with their first birth.

Implications for practice and further research

The review highlights the experiences of women with OASIS following childbirth and identifies the need for improvement in the care, assessment and management of these women to alleviate the physical and psychological consequences of OASIS, including decisions in relation to future pregnancies and childbirth.

All midwives caring for women in pregnancy and childbirth need to provide evidence based care to prevent or minimise perineal trauma to the women we care for. The role of the midwife in perineal care and assessment cannot be over emphasised as Wilson (2017) notes that in the majority of vaginal births, the midwife will be the only practitioner assessing and classifying perineal trauma.

Women should receive an early debrief regarding OASIS by her health care provider. The early discussion and implementation in care and management of OASIS should be initiated by the midwife following birth and reinforced prior to discharge. Early referral to a team which specialises in perineal trauma is required before discharge from maternity

Continued follow up for these women, ideally via multidisciplinary postnatal clinics is required and clear referral mechanisms be put in place to ensure timely access. Consultations should include discussion in relation to future births and modes of birth along with interventions that help in the treatment and management of symptoms as recommended by the RCOG (2015) guidelines and reflect the psychological issues which may arise following OASIS.

All heath care professionals should be educated and informed on the short and long term sequelae associated with OASIS to ensure appropriate, evidence based advice and information is provided to the women and their families. Such knowledge may enhance practice by enabling health care professionals to help women make sense of their experiences, alleviate symptoms associated with OASIS, help them to cope with the experience and prepare for subsequent births.

Further qualitative research is required to explore the effects of OASIS on women and their families, particularly from a long term perspective. Many of the reviewed studies were confined to women's experiences of the earlier consequences of OASIS with the exception of the quantitative research of Evans et al. (2019).

Limitations

The majority of the participants in the studies reviewed were Caucasian women and may not reflect the experiences of more culturally and geographically diverse women. In addition, the decision to limit the search to include only studies published in English may have further excluded the experiences of OASIS amongst culturally and geographically diverse women.

Conclusion

The association between OASIS and maternal quality of life following childbirth can be substantial as evidenced by this literature review. The complex emotional experiences of women following

OASIS were highlighted and the effects these emotions can have on activities of daily living. This review has highlighted that many women following OASIS feel unsupported by healthcare professionals which includes a lack of information on what to expect following sustaining OASIS, how best to care for themselves after OASIS and a lack of follow up care. Concerns around future pregnancies and the impact of OASIS affecting women's decisions in relation to future pregnancies were also discussed.

It is clear from the review that women seek compassionate, supportive and informed care when contending with the short and long term effects of OASIS. As a starting point, the importance of evidence based perineal care is essential amongst midwives to prevent and minimise perineal damage in partnership with the women we care for. There should be a greater awareness amongst midwives about OASIS including diagnosis and the impact it can have, both physically and psychologically on the woman and her family. It is important that women with OASIS following childbirth are identified, assessed and managed appropriately both in the maternity hospitals and in the community. Establishing comprehensive, multi-disciplinary care to support women who experience OASIS and associated morbidities is of great importance when addressing the needs of these women and future research on women's experiences of OASIS is required to ensure their needs continue to be met.

Ethical approval

Not required

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Declaration of Competing Interest

None declared

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