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ABSTRACT BOOK



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Keynote

K01

The nature of midwifery provision of care and a few practical situations

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Maternal and newborn health are essential indicators of population health and wellbeing. Good health during pregnancy and at birth extends beyond the perinatal period and is a crucial building block for later health. In the first part of the presentation a brief overview will be given on health and care of pregnant women in the Nordic countries. The Nordic health care model builds on the equity principle, however an analysis of maternity care shows that while there are certainly certain commonalities among the Nordic systems the reality is considerably more complex. In the second part of the presentation a few practical situations of the Icelandic maternity care context will be explored through a lens of national and international research findings. These situations refer to; women's expectations and experience of birth, organization of maternity care and migrant childbearing women in Iceland. Many positive achievements have been reached in past decades but new challenges reflect the characteristics of childbearing women as well as healthcare factors in the country. An inconsistency in what is known and what is practiced can be seen in some aspects of maternity care. Future planning and decision-making about health practices for pregnant women can benefit from increased preventive and supportive care.

K02

Childbearing and long-term maternal health: Studies from the Danish National Birth Cohort

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Most women become mothers, and the effect of motherhood on health depends on the experiences, biology and vulnerability of the individual woman. Pregnancy, childbirth and lactation involve high physical demands and major biological changes of importance for later disease susceptibility. From early to late motherhood, psychological and social challenges related to parenting, care giving, and providing for a family have both positive and negative effects on health. Mothers are typically young women, who are valuable members of the work force. Their health is of paramount importance, not only for themselves and their families, but also for society. Within the Danish National Birth Cohort which recruited app. 100,000 pregnancies 1996-2002, a Maternal Follow-up was carried out when the mothers were in the mid-forties, and 53,000 mothers responded to a web-based questionnaire. Detailed register information provided information about all births of each woman and disease development after childbearing. We have studied how mode of delivery is associated with short- and long-term mental health, and also how a woman's long-term sexual health is associated with her full birth history and history of perineal tears. Extended lactation is frequent in the Nordic countries, and we have examined how it is associated with long-term maternal cardio-vascular health. In the overall frame of understanding motherhood in a life-course perspective, results from these studies will be presented and discussed.

K03

Medical vs social model of childbirth

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Social scientists can bring different perspectives and theoretical understandings to research into midwifery and maternity care.

The medical model is 'easy' to understand, widely used in the media, based on science, claiming to rely on objective measurement of symptoms and clinical observation. Thus the medical model offers individual solutions to individual patients. The social model argues that there is inter-dependency between the ill person and their environments. It focuses on everyday life and socio-economic, cultural and environmental aspects of health. The social model considers a wider range of factors that affect someone's health, i.e. lifestyle, gender, poverty or discrimination. It is generally not individualist, but complex and multi-dimensional and often without easy solutions.

The social model maintains that pregnancy/childbirth are largely physiological events common in most women's lives. Thus pregnancy and childbirth do not normally need medical intervention or the transfer to hospital. A social

model of care accepts childbirth as a normal social event in which preventative measures can be used. The medical model portrays a different view, namely that childbirth is potentially pathological, and therefore every woman is potentially at risk when she is pregnant and/or in labour. In short the medical model wants us to believe that pregnancy and childbirth are only safe in retrospect.

The medical model is often portrayed in the media as the most appropriate and hence safest approach to pregnancy and childbirth not only 'controls' women, but also their families and friends and their health care providers. Understanding key sociological models of pregnancy and childbirth can help politicians, journalists, policy-makers, midwives, doctors, and other health care providers, childbirth activists as well as pregnant women and new mothers (and their partners) to put issues around 'normal birth' into perspective.

Oral session 1

1.1-Midwifery models of care I

O-1.1.1

Mothers' experiences in relation to a new Swedish postnatal home-based model of midwifery care - Prospective cross sectional study

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Background:

The goal of postnatal care is to provide the highest possible quality of care and medical safety with the least possible intervention in order to optimize health and wellbeing of the new family. The aim of the study was to describe mothers' experiences in relation to a new postnatal home-based model of midwifery care.

Method:

Prospective cross sectional study based on quantitative and qualitative data (mixed method). A new postnatal home-based model of midwifery care was introduced and evaluated in Sweden. Healthy mothers with an uncomplicated pregnancy and childbirth, with a healthy baby answered an on-line questionnaire. Data were collected during one year (2017-2018) and analyzed with descriptive statistics and content analysis.

Findings:

In total, 180 mothers with 1-5 children were included. They were most likely to have been discharged between 6 and 12 hours after childbirth (56%) and felt the time for discharge as good (90%). The postnatal check-up included telephone contact (100%), home visit (94%) and hospital visit (94%). The mothers were most likely to have had a positive postnatal care experience by the new postnatal model of midwifery care (mean VAS 8.74, Std. Deviation 1.438). For next childbirth 75% of the mothers would prefer home based postnatal care.

Conclusion:

Home-based postnatal care is well accepted by mothers who were early discharged after childbirth. Mothers with a positive experience of the new postnatal model of midwifery care would prefer home-based postnatal care for next childbirth. Midwifery care should include home-based postnatal care.

O-1.1.2

Work situation and professional role for midwives at a labour ward, pre and post the introduction of a midwifery model of care.

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Background:

The work situation for midwives in different countries is related to high levels of stress, burnout and heavy work load. One aspect of the professional role of midwives is woman-centeredness, theoretically described in midwifery models of care. However, no studies are found about the outcome for midwives work related to midwifery models of care.

Therefore, the aim of this study was to explore and analyse the experience of work situation and professional role for midwives at a labour ward, pre and post the introduction of a midwifery model of care (MiMo).

Method:

A simultaneous qualitative and quantitative mixed method approach was used in this longitudinal study. The core component comprised of a qualitative inductive secondary content analysis of three focus group interviews with 16 midwives exploring how midwives experienced and described their work situation and professional role pre and post implementation of MiMo. The supplemental component were a quantitative survey analysis of the work situation for midwives (n=58) pre and post the intervention, and the deductive analysis was driven by the qualitative result.

Findings:

The qualitative core component consisted of the concepts *Balance between Women and Organisation*, *Midwives - Diverse as both Profession and Person* and *Strained Work Situation* pre intervention. Post intervention *Balance between Midwifery and Organisation*, *Midwives - An Adaptable Profession*, *Strained Work Situation* and lastly a new category *Ability to concretise midwifery* emerged. The quantitative items that had corresponding measures connected to the qualitative categories were analysed. There were no significant differences in any of the quantitative analyses pre and post the introduction of MiMo.

Conclusion:

Working according to MiMo appears not to have any effect on the strained work situation in midwives, in the context and with the measurements studied here. Although MiMo contributed to raise awareness of the professional role.

O-1.1.3

Evaluation of a midwifery model of woman-centred care during childbirth - a mixed-method study

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Background:

Theoretical models for midwifery have been developed in many maternity care settings but few have been evaluated. Even if there are similarities including dimensions of woman-centredness and promotion of normality of childbirth, the models must be related to different maternity care cultures. Therefore, a midwifery model of woman-centred care (MiMo) based on research in Iceland and Sweden has been developed. The aim of the study was to evaluate the usefulness and effects of a midwifery model of woman-centred care (MiMo) provided by midwives during childbirth.

Method:

A mixed method study conducted before and after an intervention at two units for normal births at Sahlgrenska University Hospital, Sweden. Midwives at one of the units received a one-day (8 hours) education about the model and subsequently took part in regularly scheduled reflection groups during 2015-2016. Midwives at another unit served as controls. The primary outcomes were augmentation with oxytocin in primiparous women (n= 6882), and childbirth experiences in primiparous women measured with a numeric rating scale in a questionnaire (n=995). The usefulness of the study was assessed by the health care professionals through focus group interviews with 43 participants: midwives (n=16), obstetricians (n = 8), assistant nurses (n= 11) and managers (n=8).

Findings:

Findings from the study will be presented at the conference.

Conclusion:

Conclusion of the study and the usefulness of the MiMo model in clinical praxis will be presented at the conference.

O-1.1.4

Stop, think, reflect, realise - first-time mothers' experiences of taking part in longitudinal maternal health research

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Background:

Longitudinal cohort studies gather large amounts of data over time, often without direct benefit to participants. A positive experience may encourage retention in the study, and participants may benefit in unanticipated ways. To explore first-time mothers' experiences of taking part in a longitudinal cohort study and completing self-administered surveys during pregnancy and at 3, 6, 9 and 12 months' postpartum.

Method:

Content analysis of free-text comments written by participants in the **Maternal health And Maternal Morbidity in Ireland** study's five self-completion surveys, a multi-site cohort study exploring women's health and health problems during and after pregnancy. Surveys asked questions about urinary and anal incontinence, pain, sexual and mental health issues and partner violence. Ethical approval was granted by the site hospitals and university. A total of 2174 women were recruited from two maternity hospitals in Ireland between 2012 and 2015.

Findings:

One thousand comments were made in the five surveys, 676 of which related to taking part in the study. Antenatally, barriers related to surveys being long and questions being intimate. Postpartum, barriers related to being busy with life as first-time mothers. Four sub-themes relating to the benefits gained emerged; 'access to information', 'relaxation and enjoyment', 'stopping to think' and 'prompt to get help'. Women described the survey questions as valuable sources of information, and learnt what was/was not normal in relation to one or some health issues. The content encouraged some to take better care of themselves and prompted others to seek professional help.

Conclusion:

Findings suggest that survey research can 'give back' to women by being a source of information and a trigger to seek professional help, even while asking sensitive questions. Understanding this can help researchers construct surveys to maximise benefits, real and potential, for participants.

1.2-Health promotion in pregnancy

O-1.2.1

Experiences of pregnant women with pregnancy-related online information - A qualitative study.

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Background:

Over the last decade, pregnant women increasingly use the internet as a source to look up pregnancy-related information. While it has been suggested that online information offers pregnant women reassurance by easily having access to information, it has also been suggested to cause feelings of stress and insecurity. Studies on this topic, however, are rare. The aim of this study therefore was to explore pregnant women's experiences with pregnancy-related online information.

Method:

For this explorative, qualitative study, we used fifteen semi-structured interviews that were carried out for the IUGR Risk Selection Study (IRIS). Pregnant women were purposively selected. Moreover, we conducted six interviews among pregnant women which were selected via the researchers' network. An interpretative approach and abbreviated grounded theory were used. Transcribed interviews were thematically analysed by two researchers.

Findings:

Our results showed that respondents gather information out of curiosity (theme 1) and sometimes feel insecure after reading online information (theme 2). Respondents check the reliability of the information retrieved online and evaluate the information provided by their midwives as more reliable (theme 3). Despite this, respondents view the internet as an easily accessible medium, where they can retrieve information faster than through their midwife (theme 4). One overarching theme was the need of pregnant women to get confirmation that their pregnancy was going well and that their experiences were normal (theme 5).

Conclusion:

For pregnant women, the internet is a fast and easy way to gather pregnancy-related information. They especially gather information out of curiosity which can sometimes lead to insecurity. Despite the availability of online information, pregnant women trust information provided by their midwife the most. Future studies are required to investigate how health professionals, including midwives in particular, can support and comfort pregnant women in their search for pregnancy-related online information.

O-1.2.2

'I didn't fit in' - Reasons for not attending parental education groups in Antenatal and Child health Care

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Background:

In Sweden expectant and new parents are offered parental education groups (PE) during pregnancy in Antenatal Care (AC) and after delivery in Child health Care (CHC) with the goal of preparing for childbirth and parenthood. Parents also seek information from other sources such as the web and magazines to gain information. Nevertheless, many parents feel unprepared for parenthood. During pregnancy and the time closest to childbirth is an important part of the transition to parenting and parents are very receptive to advice and information. To gain more knowledge about parents' participation in PE the *aim* of this study was to explore expectant and new parents' reasons to participate or not participate in PE.

Method:

A web questionnaire including open questions was answered by 915 parents with children aged 0 to 21 months. Open questions about (a) reasons to not participate, (b) anything that could change their mind and (c) parenting support instead of the PE was analysed using content analysis.

Findings:

The parents expressed reasons not to attend on an individual, group and organizational level. At an *individual level* they expressed personal reasons or that they had other forms of support. When it came to the *group level* the parents asked for more heterogeneity and openness regarding both the groups' content and methods, not excluding parents and that parents' different interests could be accommodated within the group. Reasons for not attending PE at *organizational level* were due to lack of information or invitation from AC or CHC, or that PE was not available.

Conclusion:

Parents ask for more nonconformity and diversity in PE. Despite of different approaches or attitudes all parents should be able to feel included in a way that would be relevant for them to participate in PE.

O-1.2.3

The effect of an unsupervised water exercise program on low back pain and sick leave among healthy pregnant women - A randomised controlled trial

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Background:

Low back pain is highly prevalent among pregnant women, but evidence of an effective treatment are still lacking. Supervised exercise either land or water based has shown benefits for low back pain, but no trial has investigated the evidence of an unsupervised water exercise program on low back pain. We aimed to assess the effect of an unsupervised water exercise program on low back pain intensity and days spent on sick leave among healthy pregnant women.

Method:

In this randomised, controlled, parallel-group trial, 516 healthy pregnant women were randomly assigned to either unsupervised water exercise twice a week for a period of 12 weeks or standard prenatal care. Healthy pregnant women ≥ 18 years, with a single fetus and between 16 and 17 gestational weeks were eligible. The primary outcome was low back pain intensity measured at 32 weeks. The secondary outcomes were self-reported days spent on sick leave, disability due to low back pain and self-rated general health.

Findings:

Low back pain intensity was significantly lower in the water exercise group, with a score of 2.01 (95% CI 1.75-2.26) vs. 2.38 in the control group (95% CI 2.12-2.64) (mean difference = 0.38, 95% CI 0.02-0.74 $p = 0.04$). No difference

was found in the number of days spent on sick leave (median 4 vs. 4, $p = 0.83$), disability due to low back pain nor self-rated general health. There was a trend towards more women in the water exercise group reporting no low back pain at follow-up (21% vs. 14%, $p = 0.07$).

Conclusion:

Unsupervised water exercise results in a statistically significant lower intensity of low back pain in healthy pregnant women. It did not affect the number of days on sick leave, disability due to low back pain nor self-rated health.

O-1.2.4

Birth in an Electronic World: First-Time Mother's Experiences of Self-Preparing for Birth

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Background:

As we move forward into the 21st century we are witnessing a surge of self-educating and connecting with others via electronic media (e.g., Internet sites, Facebook, Twitter, Instagram). Current information is a fingertip away. Knowledge can be acquired without the formalities of a classroom. Nevertheless, obtainable information can be fragmented, inconsistent, weakly linked and poorly referenced. In this electronic world, nearly everyone claims or seems to be an expert. Nowhere is this more profound than in the electronic world of birthing, where birthing in hospital is frequently dramatised as a frightening or intimidating experience. This phenomenon is deeply embedded in perinatal education and warrants an in-depth investigation to uncover the meaning of how mothers self-prepare with electronic media for birthing in hospitals.

Method:

A sequential mix of two qualitative designs commenced. A preliminary descriptive design, involving three focus groups (childbirth educators, obstetric providers and labour and delivery nurses) was conducted to inform researchers of provider perceptions of women self-preparing with electronic media. Then, a primary hermeneutic design was used to conduct one-to-one in-depth interviews from a purposive sample ($n = 7$) of young first-time mothers (FTMs).

Findings:

The preliminary descriptive findings proposed that interviewing young FTMs self-preparing for birthing in hospitals was warranted. A primary hermeneutic design discovered that FTMs were self-preparing with electronic media for what ifs based on what is known about birthing. At times, this educated the mothers and some became more knowledgeable or informed; yet, there was also a debilitating effect, which increased the mothers' level of anxiety and fear.

Conclusion:

Providing credible electronic linkages to the Internet, guided by their care providers, is imperative for educating all mothers throughout the world. By addressing mothers' needs for birthing information they can 'birth with confidence' as they enter the electronic world of birthing in a hospital.

1.3-Mental health postpartum

O-1.3.1

Antenatal depressive symptoms and early initiation of breastfeeding in association with exclusive breastfeeding 6 weeks postpartum: a longitudinal population-based study

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Background:

Depressive symptoms negatively impact on breastfeeding duration, whereas early breastfeeding initiation after birth enhances the chances for a longer breastfeeding period. Our aim was to investigate the interplay between depressive symptoms during pregnancy and late initiation of the first breastfeeding session and their effect on exclusive breastfeeding at 6 weeks postpartum.

Method:

In a longitudinal study design, web-questionnaires including demographic data, breastfeeding information and the Edinburgh Postnatal Depression Scale (EPDS) were completed by 1217 women at pregnancy weeks 17-20, 32 and/or at 6 weeks postpartum. A multivariate logistic regression model was fitted to estimate the effect of depressive symptoms during pregnancy and the timing of the first breastfeeding session on exclusive breastfeeding at 6 weeks postpartum.

Findings:

Exclusive breastfeeding at 6 weeks postpartum was reported by 77 % of the women. Depressive symptoms during pregnancy (EPDS \geq 13); (OR:1.93 [1.28-2.91]) and not accomplishing the first breastfeeding session within 2 hours after birth (OR: 2.61 [1.80-3.78]), were both associated with not exclusively breastfeeding at 6 weeks postpartum after adjusting for identified confounders. The combined exposure to depressive symptoms in pregnancy and late breastfeeding initiation was associated with a 4-fold increased odds of not exclusive breastfeeding at 6 weeks postpartum.

Conclusion:

Women reporting depressive symptoms during pregnancy seem to be more vulnerable to the consequences of a postponed first breastfeeding session on exclusive breastfeeding duration. Consequently, women experiencing depressive symptoms may benefit from targeted breastfeeding support during the first hours after birth.

O-1.3.2

Impact of maternal adversity on breastfeeding, mood and mother-infant interaction and cortisol attunement during the first year postpartum. Some findings from the Maternal adversity, vulnerability and neurodevelopment study (MAVAN).

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Background:

Exclusive breastfeeding for the first six months postpartum is considered to be the best nutritious alternative for babies because of its positive effects on maternal and infant health. Despite this, there is considerable variation in the prevalence of breastfeeding. **Aims:** To explore factors that influence 1) maternal breastfeeding status and 2) "consequences" of breastfeeding on the infant and factors that 3) regulate physiological associations between mother and baby.

Methods:

Participants (n=170) derive from a longitudinal Canadian study "Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN)". Mothers provided data during pregnancy and first year postpartum on breastfeeding, early life adversity (CTQ), oxytocin gene and oxytocin gene receptor polymorphisms (OXT rs2740210, OXTR rs237885, OXT rs4813627), cortisol, depression and anxiety (CES-D, STAI), infant temperament (IBQ) and maternal sensitivity through videotaped mother-infant interactions at 3 and 6 m postpartum.

Findings:

Results: Maternal early life adversity associated with a shorter breastfeeding duration and higher levels of depression in the mother. A moderated mediation analysis showed that the inverse relation between mothers' early adversity and the duration of breastfeeding was mediated by mothers' depression level, but only in women carrying one variant of the oxytocin rs2740210 gene marker (CC genotype). When we explored the associations between breastfeeding at 3 months postpartum, maternal sensitivity and infant temperament, we found in a moderated mediation analysis that mothers who breastfeed at 3 months acted more sensitively towards their infants when they were 6 months old and they in turn had infants who at 18 months showed reduced negative affectivity. Finally, when considering the role of cortisol and breastfeeding, we found higher cortisol levels in infant mother dyads who breastfeed.

Conclusion:

Our results help to clarify the interdependence between early life experiences, mood and breastfeeding in the mother-infant emotional and physiological relationship and in child emotional development.

O-1.3.3

Maternal depression symptoms during the first 21 months after giving birth

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Background:

The first year after childbirth means a major transition for all parents. The new role can accentuate inadequacies and feelings of powerlessness making a person more vulnerable to depression. The aim of this study was to determine the prevalence of maternal postpartum depressive symptoms at different times after giving birth (0-21 months)

Method:

A total of 888 mothers from Sweden recently giving birth to a child (having a child between 0 and 21 months old) participated in the study answering a web questionnaire containing the Edinburgh Postnatal Depression Scale (EPDS) together with questions about e.g. stress, development of the child and self-efficacy.

Findings:

The prevalence over 21 months of postnatal maternal depression in this sample was 27.8% for EPDS ≥ 12 . The results showed a higher than expected prevalence for mothers with children aged 9, 12 and 17 months, and a lower than expected prevalence for mothers with children aged 2 and 16 months. Screening for depression often occurs early on after giving birth, at a point in time when the depression symptoms are not as pronounced.

Conclusion:

Navigating the period after childbirth is difficult and many mothers have symptoms of depression beyond the child's first year. Depression symptoms are not just something that appears just after giving birth, but can also become more pronounced at later stages indicating a need for repeated screening for depression and consultation during the child's first years.

O-1.3.4

'You need more understanding' - Perinatal and motherhood experiences of Icelandic mothers who are survivors of childhood sexual abuse

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Background:

It is known that childhood sexual abuse (CSA) has lasting and profound consequences for women's health but there remains a need for increased knowledge and deeper understanding of survivor's experiences of the perinatal period and motherhood.

Method:

Qualitative: the Vancouver-school of phenomenology. Nine mothers, all CSA survivors, were interviewed once or twice, sixteen interviews in total.

Findings:

All the mothers interviewed had experienced difficulties and trauma: sometimes during pregnancy and/or during birth, sometimes postpartum or during their children's early life. Most of them reported many deviations from a normal perinatal period. The majority had experienced consequences of the abuse on their health and used healthcare services frequently. The overarching theme of the results is: "You need more understanding." This indicates a lack of awareness and knowledge among the public and healthcare professionals of the long-term impact of CSA on survivor mothers' experiences of the perinatal period and motherhood. Three main subthemes appeared: 1) "There is always something wrong with me" relating to the effects of CSA on physical and psychological health, in general and during pregnancy. 2) "You're most vulnerable during birth" relating to the effects on pregnancy, birth, feelings and experiences of perinatal services, particularly midwifery services. 3) "Painful growth" influencing the maternal role, challenges, well-being, the need for support and emotional processing.

Conclusion:

Midwives, other healthcare professionals and the public need more knowledge to deepen understanding of this phenomenon, in order to enhance midwifery and healthcare services and mothers' experiences of the perinatal period and motherhood. This need could be met with a consulting or specialist midwife on the subject.

1.4-Diseases in childbirth

O-1.4.1

Reproductive Trends in Women with Rheumatoid Arthritis in Denmark from 1990 to 2014

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Background:

Maternal rheumatoid arthritis (RA) has previously been associated with preterm birth and low birthweight. However, disease criteria, treatment strategies and prenatal care in women with RA has changed over time, which may have influenced reproductive trends.

Aim: To assess the reproductive trends in women with RA with regards to number of children, mean age at birth, preterm birth and birthweight.

Method:

A Danish nationwide cohort of all children born from 1990 to 2014 was established through linkage of data from Danish National Health Registries. The births were stratified into three periods; 1990-1999, 2000-2009 and 2010-2014. Number of children, mean age at birth, and mean birth weight were described. General linear regression models and multiple logistic regression models were used to estimate mean differences (MD) in birth weight and preterm birth per period among children of mothers with RA compared to children of mothers without RA.

Findings:

A total of 1,556,210 children were born during the study period. In the early period children of mothers with RA constituted 0.10% of all liveborn children, whereas in the late period they constituted 0.32%. After adjustment, the MDs in birthweight in children of mothers with RA were similar over time compared to children of mothers without RA, ranging from -80.6 grams in 1990-1999 to -88.8 grams in 2010-2014. The risk of preterm birth was significantly higher in mothers with RA from 2000 and onwards ranging from OR = 1.45 (95% CI 1.17-1.78) in 2000-2009 to OR = 1.72 (95% CI 1.35-2.19) in 2000-2014.

Conclusion:

We observed an increased proportion of births among women with RA from the early to the late period. Children of mothers with RA were slightly smaller. From 2000 an increased risk of preterm birth among women with RA was observed. These findings are important in clinical counseling and management of women with RA.

O-1.4.2

Maternal Rheumatoid Arthritis and the Risk of Spontaneous Abortion. A Danish nationwide Cohort Study.

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Background:

Previous studies provide conflicting evidence on the risk of spontaneous abortion (SA) among women with the chronic autoimmune disease rheumatoid arthritis (RA) - making pre-pregnancy counselling difficult.

Aim: to investigate whether women with RA, diagnosed either before (clinical RA) or after pregnancy (preclinical RA), have a higher risk of SA than women without RA.

Method:

All clinically recognized pregnancies in Denmark from January 1st 1977 to December 31st 2014 were included. From the National Hospital Registry we obtained information on SA and maternal RA. Further categorization of RA was: clinical RA > or ≤ than 5 years prior to pregnancy and preclinical RA > or ≤ 5 years after pregnancy. Multivariate logistic regression analysis was performed with adjustment for important confounders. The analyses were made separately according to maternal age < or ≥35 years since the overall risk of SA markedly increases at this age.

Findings:

A total of 3,274,938 pregnancies were registered. Of these 30,537 (0.93 %) were exposed to maternal RA (clinical or preclinical). Women <35 years with clinical RA diagnosed 0-5 years before pregnancy had an increased risk of SA compared to women without (OR 1.25 [95% CI: 1.06-1.47]). For those diagnosed more than 5 years before the pregnancy the risk was borderline significant (OR 1.14 [95% CI:0.96-1.34]). Among women with clinical RA aged ≥35 years no increased risk was found. For women with preclinical RA no association was found.

Conclusion:

Women < 35 years with recently diagnosed RA seem to have an increased risk of SA. The findings among women aged ≥ 35 years should be interpreted with caution. Further analyses on the effect of advanced maternal age are ongoing and will be available before the conference.

O-1.4.3

The challenges of healthcare encounters between women with endometriosis and healthcare professionals.

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Background:

Studies of healthcare experiences of women with endometriosis are often focused on negative aspects such as normalization and trivialization, while research on positive experiences, and healthcare professionals' (HCPs) experiences of the encounters, is limited.

Method:

The aim was to identify and describe the healthcare encounters between women with endometriosis and HCPs. Two interview studies were conducted, including nine women with endometriosis in study I, and 25 HCPs in study II. The interviews were analyzed with interpretive phenomenology (study I) and conventional content analysis (study II).

Findings:

The healthcare encounters were experienced as troublesome, from both the women's and the HCPs' perspectives. The women struggled with disclosing their hidden pain, a struggle that was also detected and described by the HCPs.

Many HCPs were aware of the course of the disease and its symptoms, but they described the encounters as challenging. The fact that the pain often occurred during menstruation made it easy to misinterpret it as dysmenorrhea, which was experienced as more easily handled and treated. The focus of dysmenorrhea often made the women feel normalized and trivialized.

When the HCPs and the women described the encounters, the experiences were diverse. On the one hand, HCPs claimed that they were aware of strategies to accomplish corroborating encounters and they had the ambition of confirming and acknowledging the women. On the other hand, the women's accounts of healthcare encounters were double-edged. They did include constructive experiences, which comprised the positive aspects described by HCPs, but they also had destructive experiences.

Conclusion:

The encounters were experienced as troublesome for both women and HCPs, and there was a dissonance regarding how the HCPs and the women described the encounters.

O-1.4.4

How is spondyloarthritis associated with pregnancy and birth outcomes? A Danish population-based cohort study

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Background:

Spondyloarthritis (SpA), comprises a group of chronic inflammatory diseases including ankylosing spondylitis, psoriatic arthritis, reactive arthritis, arthritis associated with inflammatory bowel diseases, and undifferentiated SpA. We aimed to describe the prevalence of SpA in the Danish pregnant population and to estimate the risk of adverse pregnancy and birth outcomes in women with SpA compared to women without the disease.

Method:

Using the Danish Medical Birth Register, we identified 1,199,583 singleton pregnancies during 1997 through 2016. Of these, 3,717 pregnancies occurred in 2,478 women with a diagnosis of SpA prior to delivery. Outcome measures included preterm birth (gestational age < 37+0), moderately preterm birth (32+0-36+6), very preterm birth (<32+0), mode of delivery (vaginal, assisted vaginal delivery, cesarean section (CS)), preeclampsia, use of epidural, small for gestational age birth (SGA), Apgar score below 7 at 5 minutes, and perinatal mortality. Logistic regression models were used to calculate odds ratios (OR) for all outcomes.

Findings:

The overall prevalence of SpA diagnosed prior to delivery was 0.31%, increasing from 0.01% in 1997 to 0.60% in 2016. Women with SpA had a higher risk of moderately preterm birth (aOR 1.56 [95% CI: 1.33-1.83]), very preterm birth (aOR 1.47 [95% CI: 1.04-2.08]), elective CS (aOR: 1.44 [95% CI: 1.26-1.64]), emergency CS (aOR 1.17 [95% CI: 1.04-1.33]), SGA (aOR 1.09 [95% CI: 0.97-1.23]), preeclampsia (aOR 1.22 [95% CI: 0.99-1.50]), and use of epidural (aOR 1.11 [95% CI: 1.02-1.20]) compared with pregnancies in women without SpA. Overall, we found similar estimates for the subtypes of SpA.

Conclusion:

SpA and all subtypes of the disease were associated with increased risk of adverse pregnancy and birth outcomes. Clinical focus should include efforts to identify pregnancies with SGA. Future research should investigate the pathophysiology of preterm labor in women with SpA to facilitate development of interventions preventing this outcome.

Oral Session 2

2.1-Interventions and organization of care I

O-2.1.1

Regional variations in childbirth interventions and their correlations with adverse outcomes, birthplace and care provider: a nationwide explorative study

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Background:

Variations in childbirth interventions may indicate inappropriate use. This study aims to explore regional variations in the Netherlands and their correlations with referral rates, birthplace, and interventions, adjusted for maternal characteristics.

Method:

Intervention rates were analysed using a national professional data register which allowed comparisons between twelve regions among single childbirths after 37 weeks of gestation in 2010-2013 (n=614,730). These were adjusted for maternal characteristics using a multivariable logistic regression. The primary outcomes were intrapartum referral, birthplace, and the interventions used in midwife and obstetrician-led care settings. The correlations both between primary outcomes and between adverse outcomes were calculated.

Findings:

Intrapartum referral rates varied between 55% - 68% (nulliparous) and 20% - 32% (multiparous women), with a negative correlation with receiving midwife-led care at the onset of labour in two-thirds of the regions. Regions with higher referral rates had higher rates of severe postpartum haemorrhages. Rates of home birth varied between 6% - 16% (nulliparous) and 16% - 31% (multiparous), with a negative correlation regarding episiotomy and postpartum oxytocin administration rates. Among midwife-led births, episiotomy rates varied between 14% - 42% (nulliparous) and 3% - 13% (multiparous) and in obstetrician-led births from 46% - 67% and 14% - 28% respectively. Rates of postpartum oxytocin administration varied between 59% - 88% (nulliparous) and 50% - 85% (multiparous) and artificial rupture of membranes between 43% - 52% and 54% - 61% respectively. A north-south gradient was visible with regard to birthplace, episiotomy and oxytocin.

Conclusion:

Substantial regional variations were found, with higher rates of episiotomy and postpartum oxytocin administration in regions with fewer home births. This suggests that attitudes towards childbirth vary, independent of maternal characteristics. Further research is needed to identify explanations and explore ways to reduce unwarranted intervention rates.

O-2.1.2

Obstetric interventions, trends and drivers of change: A 20-year population based study from Iceland

Emma Marie Swift¹, Helga Zoega², Kristjana Einarsdóttir², Gunnar Tomasson², Helga Gottfredsdóttir²

¹University of Iceland, REYKJAVÍK, Iceland
, Iceland

Background:

Population data on obstetric interventions is often limited to cesarean sections. We aimed to provide a more comprehensive overview of trends in use of several common obstetric interventions over the past two decades.

Method:

The study was based on nationwide data from the Icelandic Medical Birth Register. Incidence of labor induction, epidural analgesia, cesarean section and instrumental delivery was calculated for all births in 1995-2014. Change over time was expressed as relative risk (RR), using Poisson-regression with 95% confidence intervals (CI) adjusted for several maternal and pregnancy related characteristics. Analyses were stratified by women's parity and diagnosis of diabetes or hypertensive disorder.

Findings:

During the study period, there were 81389 intended vaginal births and 5544 elective cesarean sections. Among both primiparous and multiparous women, we observed a marked increase across time for labor induction [RR=1.78, CI: (1.67-1.91) and RR=1.83, CI 1.73-1.93, respectively] and epidural analgesia [RR=1.40, CI: (1.36-1.45) and RR=1.74, CI: (1.66-1.83), respectively]. A similar trend of smaller magnitude was observed among women with hypertensive disorders but no time trend was observed among women with diabetes. Incidence of cesarean section and instrumental delivery remained stable across time.

Conclusion:

The use of labor induction and epidural analgesia increased considerably over time, while the cesarean section rate remained low and stable. Increases in labor induction and epidural analgesia were most pronounced for women without a diagnosis of diabetes or hypertensive disorder and were not explained by maternal characteristics such as advanced age.

O-2.1.3

Feasibility of a health and risk categorization system at an interdisciplinary birth unit in Iceland

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Background:

Rates of childbirth interventions and adverse birth outcomes among healthy, low-risk women are higher in interdisciplinary birth units than in alongside or freestanding midwifery units or home births. Iceland's only tertiary hospital has one interdisciplinary birth unit that provides services for women with health problems and risk factors, but also for healthy, low-risk women. The aim of this feasibility study was to develop a health and risk categorization system and evaluate its ability to: 1) be a clinical tool to monitor the health and risk status of admitted women, and 2) be an academic instrument for research on the birth outcomes of women with different health and risk status.

Method:

The health and risk categorization system was based on research and national guidelines on health and risk categorization in pregnancy and labour. The system was added to the midwives' electronic registration, piloted, and upgraded in accordance with midwives' suggestions. All midwives received individual instructions on how to use the system. Data for the study was then collected from May 2017 to May 2018.

Findings:

Of admitted women 96.3% (2659/2760) were categorized in the system. Of these, 67.8% were categorized as low-risk on admission and 32.2% with health problems or risk factors. During birth services 56.3% of low-risk women (38.2% of the categorized group) were re-categorized with health problems, leaving 29.6% categorized as low-risk at the end of birth services. Categorization on admission was mostly consistent with information from the women's maternity notes while large discrepancies were found between women's maternity notes and their re-categorization during birth services.

Conclusion:

For the system to be clinically useful implementation must be followed up with updates to ensure a more complete re-categorization. Information from the system may be useful for research but needs to be revised and supplemented with data from maternity notes.

O-2.1.4**Normalizing Birth in a Tertiary Environment**

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Background:

Description of setting: Women and Infants is one of the nation's leading specialty hospitals for women and newborns and the affiliate of Brown University. It is the largest obstetrical service in the region with approximately 9,000 births a year. It is the safety net hospital for the community, a tertiary care center for pregnant women, and home to the only state-approved birthing center. In the Fall of 2016, Women and Infants was accepted into the Healthy Birth Initiative Reducing Primary Cesarean project, a multihospital learning collaborative working across the United States and ACNM to improve birth outcomes by reducing the incidence of first cesarean sections in low-risk women. These strategies include implementation of bundles that aim to reduce unnecessary intervention and increase supportive evidence-based measures. The first bundle selected by the WIH team was the "Improving Care and Comfort in Labor" bundle. An initial baseline survey on comfort and experience with low and high intervention birth was developed, disseminated, and collected from 136 providers of all types including the nurses. The analysis informs educational opportunities. Ten hour workshops on labor support were developed for all nurses.

Method:

Quality Improvement

Findings:

1:1 labor support increased 23% over the first year; intermittent auscultation increased; and epidurals in nulliparous women decreased by 5% in first year

Conclusion:

Survey results included statistically significant between group differences in comfort with unmedicated birth, experience and comfort with continuous electronic fetal monitoring versus intermittent auscultation and significant differences in comfort and experience with water immersion, use of doulas, and other low intervention pain relief modalities. Implications of results on education, professional collaboration, supporting patient's desires and engaging inter-professional stakeholders in quality improvement are reviewed. There are numerous challenges yet more rewards of embarking on quality improvement in a large facility. Patience, perseverance, and administrative buy-in are key levers in success.

2.2-Induction of labour

O-2.2.1**Protecting the Future of Normal Physiologic Birth: Making Sense of the ARRIVE Trial**

Linda Hunter

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Background:

In August of 2018, the New England Journal of Medicine published the much anticipated results of the ARRIVE Trial (A Randomized Trial of Induction Versus Expectant Management). The primary research aim was to test the hypothesis that elective induction of labor at 39 weeks would result in a lowered incidence of perinatal mortality or severe neonatal morbidity. A secondary outcome was focused on the role of elective induction of labor and the risk for primary cesarean section (PCS).

Method:

Low-risk nulliparous women were recruited across multiple geographic areas in the United States (US), including both academic and community hospital settings. A total of 6106 (out of 22,573) eligible women agreed to participate. Women were randomized into the elective induction or expectant management groups.

Findings:

The results showed no differences in the primary composite outcomes of perinatal mortality or severe neonatal morbidity. However, findings demonstrated a lower PCS rate in the elective induction group when compared with expectant management (18.6% vs. 22.2%; $P = < 0.001$)

Conclusion:

Although this study has been praised for its high quality design among experienced researchers, it still contains several limitations and many unanswered questions that affect its overall reliability. Germane to this discussion is the considerable counter evidence on the benefits of normal physiologic birth. This study has the potential to dramatically change obstetric practice. Midwives need to critically examine these findings in order to better advocate for the inclusion of clinical judgment and shared decision making in discussions regarding the risks and benefits of non-medically indicated inductions of labor.

O-2.2.2

Effects of induction of labor prior to post-term in low-risk pregnancies: a systematic review

Mette Juhl, Eva Rydahl, Lena Mariann Eriksen
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Background:

Existing systematic reviews on labor induction may use too loose inclusion criteria to actually reflect contemporary practice and/or inappropriate comparison group definitions, e.g. regarding gestational age criteria. If their conclusions form the evidence base for clinical guidelines, recent changes in obstetric practice towards earlier induction in low-risk pregnancies may be based on false conclusions. For example, some reviews include studies, where the expectant management group can continue pregnancy up to 3-4 weeks after estimated due date. We identified, assessed, and synthesized the best available evidence on maternal/fetal effects of routine labor induction in low-risk pregnancies at 41+0-6 vs. 42+0-6 gestational weeks.

Method:

We conducted a metaanalysis on 7 original studies selected from strict criteria on (1) pregnancy duration in comparison groups, (2) methods for due date estimation, and (3) timeliness. We presented preliminary findings in Gothenburg 2016. In Iceland, we will give a brief summary of main results, demonstrate methodological problems in existing evidence, and suggest a new model for defining comparison groups in studies on routine labor induction.

Findings:

Compared to expectant management, induction prior to post-term was associated with an increased risk of cesarean section (relative risk (RR) 1.11, 95% confidence interval (CI) 1.09-1.14), cesarean section due to failure to progress (RR 1.43, 95% CI 1.01-2.01), chorioamnionitis (RR 1.13; 95% CI 1.05-1.21), labor dystocia (RR 1.29, 95% CI 1.22-1.37), precipitate labor (RR 2.75, 95% CI 1.45-5.20), uterine rupture (RR 1.97, 95% CI 1.54-2.52), pH < 7.10 (RR 1.90, 95% CI 1.48-2.43), and a decreased risk of oligohydramnios (RR 0.40, 95% CI 0.24-0.67), and meconium stained amniotic fluid (RR 0.82, 95% CI 0.75-0.91). Data lacked statistical power to draw conclusions on perinatal death.

Conclusion:

Our findings do not support the widespread use of routine induction prior to post-term. We argue that appropriate inclusion criteria are critical for obtaining relevant conclusions.

O-2.2.3

Absolute numbers are important in patient information - with examples from labor induction research

Mette Juhl, Eva Rydahl
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Background:

Research literature and patient information material often present relative and not absolute risk differences. We argue that absolute numbers should be used more in patient information contexts, because relative and absolute risks are interpreted differently by the recipient: Risk differences tend to seem greater when presented in relative terms (e.g. relative risks (RR) or odds ratios (OR)), compared to absolute risks (e.g. absolute risk reduction/increase

(ARR/ARI)). Patient information material should present probabilities of outcomes in an understandable way to help patients to make appropriate decisions. However, since relative estimates do not take into account the background prevalence of an outcome, it may be difficult for patients to consider the size of the problem. The aim is to raise awareness of the communication of scientific evidence among researchers, clinicians and stakeholders. We illustrate how absolute numbers can be used to make scientific knowledge more comprehensible and discuss the implications of the choices we make regarding type of information when communicating risks.

Method:

With examples from labor induction research, we will define ARR, ARI, and number-needed-to-treat (NNT), compare them to their corresponding relative estimates, and demonstrate why they are often interpreted differently, even though they are equally correct and based on identical data.

Findings:

As an example, we found RR=1.90 for low pH (<7.10) after induction at 41+0-6 gestational weeks compared to expectant management. In relative terms, the interpretation is that the risk of low pH is increased by 90 %, while in absolute terms, the interpretation is that labor induction increases the number of children with low pH by 4 %.

Conclusion:

As health professionals we should be aware that our choice of which risk measures to present works as a tool by which we can influence people's decisions regarding a certain intervention or treatment.

O-2.2.4

IMPACT OF INTRAVENOUSLY ADMINISTRED FENTANYL VS. EPIDURAL OR NO OPIOIDS DURING LABOUR ON FIRST SUCKLING AND BREASTFEEDING

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Background:

OBJECTIVE: To explore the effect of Fentanyl vs. epidural or no opioids on various factors related to breastfeeding during the hospital stay.

DESIGN: In a cross-sectional design we will compare four groups: 1) intravenously administered opioid Fentanyl, 2) Epidural, 3) Epidural and Fentanyl or 4) no opioids

Method:

Data collection started in the maternity department of Sørlandet hospital, Norway, toward the end of 2016 and will end in the beginning of 2019. The total sample is expected to comprise > 1100 participants in pregnancy week 37-42. Cesarean sections, multiple pregnancies, breech births, diabetic mothers and mothers with a newborn receiving treatment in the neonatal intensive care unit are excluded from the study. Other variables to be analysed are pain relief, use of oxytocin, and effect of instrumental delivery and background variables. Single and multiparas will be analyzed separately. Fisher's exact test, t-test, Pearson's correlation coefficients, ordinal regression and multiple regression will be used in the analyses.

Findings:

The findings will be compared according the four study groups and 1) the time factors for the first suckling, the mother-infant interaction and body temperature of the infant after birth, 2) Potential breastfeeding problems and need for formula milk during the early postpartum period, and 3) Length of hospital stay and status with full breastfeeding on discharge and the need for extra consultation after discharge.

Conclusion:

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2.3-Childbirth experience

O-2.3.1

Length of latent phase, women's labouring experience and quality of care during labour and birth

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Background:

Women are encouraged to stay home during the latent phase to avoid unnecessary obstetrical interventions. Women report that the latent phase is mostly managed by themselves without support from professionals. For some women the latent phase is prolonged. WHO emphasises a positive labour experience as an important outcome of intrapartum care.

The aim of this study was to describe women's perceived quality of intrapartum care and labour experience in relation to prolonged latent phase.

Method:

A one-year cohort study, with 757 primi- and multiparous women (RR 63%) answered the questionnaire "Intrapartum Quality of care from Patient Perspective" QPP-I". The QPP-I consist 32 items, and background characteristics and self-reported labour prior admittance was asked for in the questionnaire.

Findings:

Primiparous women with a prolonged latent phase ≥ 18 hours, rated significantly lower scores regarding seven of ten factors in QPP-I. They scored lower on labour experience, birth as normal and feeling safe, feeling proud and feeling ignored by professionals. Multiparous women with a prolonged latent phase ≥ 18 hours, scored significantly lower on commitment midwives, lower on control over the situation and felt less safe during labour and birth.

Conclusion:

Women's perception of quality of intrapartum care, labour experience and feelings are affected by their length of labour prior admittance to labour ward. Women's description of labour onset must be considered when managing early labour care and midwives should pay increased attention to women with prolonged latent phase.

O-2.3.2**Intrapartum midwifery care impact Swedish couple's birth experiences**

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²Uppsala university, UPPSALA, Sweden

Background:

Parents' birth experiences affect bonding with their infant, which in turn may influence the child's future health. Parents' satisfaction with childbirth is multi-dimensional and dependent on both expectations and experiences and can be regarded as a significant emotional outcome. Increasing involvement of partners in intrapartum care may lead to an assumption that the birthing couple shares attitudes and expectations of intrapartum care. There is a limited knowledge regarding of couples' experiences of labour and birth related to intrapartum midwifery care. Thus this study aimed to describe and compare uniformity in couples' birth experiences of the quality of intrapartum midwifery care.

Method:

A quantitative cross-sectional study nested within a randomised controlled trial. In total 209 healthy primiparous mothers and their partners were recruited. A quality of care index was generated from an on-line questionnaire administered as a follow-up to the randomised controlled trial. Uniformity and differences were identified regarding the couples' experiences of birth and their preferences for intrapartum.

Findings:

A high level of uniformity between the mothers and their partners was revealed. Birth was a positive experience for 79% of partners and 73% of mothers whom were more likely to have experienced a spontaneous vaginal birth. Partners and mothers with a less positive birth experienced deficiencies regarding: being in control, receiving information about labour progress and midwife's presence in labour room.

Conclusion:

A uniform birth experience is seen within the couples. Parents described lacking in control during labour and birth as deficient, midwifery support during intrapartum care was important. Midwives can enhance couples' feeling of being in control during labour and birth by being attentive, present and continuously providing adequate information and emotional support.

O-2.3.3**Reviewing birth experience by a known midwife: description of a study protocol**

Valgerður Lísu Sigurðardóttir¹, Herdis Sveinsdóttir¹, Berglind Guðmundsdóttir¹, Jenny Gamble², Hildur Kristjánsdóttir¹, Helga Gottfreðsdóttir¹

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²Griffith University, BRISBANE, Australia

Background:

Women's birth experience has received research attention worldwide, showing a prevalence of negative birth experience ranging 5-34%. Considerable knowledge of predictors and impacts of negative birth experience exists, but less is known about effective interventions. The study aims to describe the development of a specific midwifery intervention consisting of two components; women writing about the birth experience and reviewing their experience with a known midwife.

Method:

The intervention was developed from the authors' prior research and literature review. Six to eight midwives, providing antenatal care at the high-risk maternity clinic at Landspítali University Hospital, provide the intervention after completing a special training program. Thirty women who had their antenatal care provided at the clinic, after 28 weeks of pregnancy, were invited to write about their birth experience and review it with the midwife who provided their antenatal care, four to six weeks after birth. The study is based on a mixed method design where quantitative and qualitative data will be collected. Data including traumatic symptoms, birth outcomes, birth experience and experience of the intervention, was collected from women before the intervention and then six weeks later. The participating midwives' diaries and focus group interviews were used to explore their experience of providing the intervention. Descriptive and thematic analysis was used.

Findings:

The protocol of the study and the training course of the participating midwives will be introduced, along with preliminary findings.

Conclusion:

The results will be used to decide whether implementation of such a specific midwifery intervention is a feasible choice in the childbirth services, from the women's midwives' perspective.

O-2.3.4

First-time mother's self-reported satisfaction with their birth experience - a cross-sectional study

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²Malmö University, MALMÖ, Sweden

Background:

A negative birth experience is associated with post-traumatic stress, an increased risk of post-partum depression, poor adaption to the mothering role, breastfeeding complications and may cause fear of childbirth. About half of the delivery departments in Sweden uses Visual Analog Scale, as an instrument to identify women who have a negative birth experience. The *objective* was to explore newly delivered first-time mother's self-reported satisfaction with their birth experience using Visual Analog Scale and to identify possible risk factors for a negative birth experience.

Method:

A cross-sectional design with a retrospectively data collection through electronical medical files, including all primipara (N=638) during year 2017 at Ystad hospital delivery ward in Sweden. Those, who rated their birth experience on Visual Analog Scale with scores <4, were chosen as the cut-off point for negative birth experience.

Findings:

Results: The mean age of the primipara was 29 years (mean 29.0 SD 5.1; range 16-47 years). Prevalence of a negative birth experience was 8.9%. Preliminary results show that it was 3.1 more likely if oxytocin augmentation was used during first stage of labour (unadjusted OR; 3.1 95% CI: 1.78-5.38) respectively oxytocin augmentation was used overall, it was 2.6 more likely (unadjusted OR; 2.6 95% CI: 1.23-3.79) having a negative birth experience. Use of analgesic with epidural and having an obstetric anal sphincter injurie were 2.1 respectively 3.1 more risk also having a negative birth experience (unadjusted OR; 2.1; 95% CI: 1.19-3.54) and (unadjusted OR; 3.1; 95% CI 1.28-7.56).

Conclusion:

Visual Analog Scale is validated instrument for experience of pain, not to measure childbirth experience. Women who scored low on Visual Analog Scale had significant more interventions with oxytocin, epidural analgesic and anal sphincter injurie. However, if the women scored pain experience or negative birth experience, is still unknown.

2.4-Autonomy and shared decision making

O-2.4.1

Protecting the health of mother and baby and the autonomy of women: on the need to adequately assess interventions in maternity care

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Background:

Different hands-on interventions to protect women from severe tears after birth have been widely implemented especially in the Nordic countries. Evidence to support the routine use of hands-on interventions to reduce severe tears is mainly based on observational studies at group level.

Method:

A critically review evaluating the current evidence for the implementation of hands-on intervention as a routine practice to protect women from severe tears after birth.

Findings:

Observational, group-level studies have been used to justify the routine use of hands-on intervention to protect women from severe tears. There is strong evidence supporting the slow speed at the time of birth to prevent severe tears. While hands-on intervention reduces the speed of birth, it may have a negative effect on the birth process on neonatal outcomes and women's agency.

Conclusion:

Evidence-based practice requires sufficient evaluation of interventions before being implemented in clinical practice. Evaluation of hands-on interventions to protect women from severe tears must include not just one outcome of interest, but also an assessment of how the intervention interferes with the normal mechanism of birth, and how it affects neonatal outcomes and the autonomy of women.

O-2.4.2

Dilemmas around shared decision-making in midwifery care: how to do right?

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Background: Shared decision-making (SDM) between care providers and patients is the norm for good decision-making in healthcare in many countries. Sharing decisions are especially relevant for maternity care as the arrival of a new child is much more than a medical event. For the woman and her partner, childbirth is a life-event that is not merely fact-based and objective; it is also contextual and personal, informed by their individual situation, values and beliefs (De Vries, 2005).

Applying SDM in midwifery practice is challenging (Nieuwenhuijze & Kane Low, 2013; Megregian & Nieuwenhuijze, 2018). For example: how should we respond to the power imbalance perceived by the woman or midwife?; what is the proper way to negotiate differences in philosophy about appropriate care choices between care providers?; what should we do when a woman does not want to be involved in a crucial decision or if the interests of the mother and the baby are inconsistent?

In this presentation, we reflect on a number of critical, real-life cases of SDM from an ethical perspective.

Method:

Critical cases were selected from interviews with community-based and hospital-based midwives (n=15) and women (n=14) in the Netherlands during the fall of 2017. Ethical analyses of the cases were done using a method of moral deliberation and the hermeneutic method (van der Scheer, 2003).

Findings: The most common dilemmas found in the critical cases were power imbalance, aligning values between woman and care provider, a woman's refusal to participate in decision-making, and moral distress of midwives who feel forced to respect women's preferences they find to be dangerous.

Conclusion:

Although ethical deliberation will not always lead to one single correct solution, it will help care providers gain a deeper understanding of these situations and the meaning they have for both themselves and the women they care for.

O-2.4.3

Shared agenda making for quality improvement; towards more synergy in maternity care

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Radboud university medical centre, Nijmegen, The Netherlands

Background:

Professionals in maternity care have started working in a network approach. To further enhance the efficacy of this multidisciplinary maternity network, the identification of priorities for improvement is warranted. The aim of this study was to create key recommendations for the improvement agenda, in co-production with patients and professionals.

Method:

We conducted a Delphi study to inventory (round 1), prioritize (round 2) and eventually approve (round 3) the improvement agenda for the maternity network. Both patients and professionals joined this study. Initial input for the study consisted of experiences from 397 patients, collected using the ReproQ questionnaire. In round 1, the expert panel gave improvement recommendations, based on the ReproQ results. This resulted in 11 recommendations. In the second round, the expert panel prioritised these recommendations. In the consensus meeting then finally the concrete improvement agenda was composed.

Findings:

Priority scores differed considerably between patients and professionals in seven items, while four items received similar priority scores from both groups. The four most important improvement activities were: Realise more single bedrooms in hospitals; Create more opportunities for the continued presence of the community midwife during labour; Initiate a digital patient record view system for the network with a view function for patients; and Introduce a case manager for pregnant women.

Conclusion:

Based on patient experience and the active involvement of patients and professionals. we were able to compose the shared agenda for quality improvement in maternity care.

O-2.4.4

Norwegian midwives' perception for their practice environment - a mixed Methods study

Miriam Lukasse, Lena Henriksen
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Background:

Midwives have always had challenging working conditions, working shifts or on-calls and weekends, as well as experiencing peaks in the workload that no duty-roster can prepare for. Midwifery work can in addition be described as intense, emotionally demanding, with the risk of experiencing traumatic events. The past decades have seen significant changes in the work-content and environment of midwives. We wanted to investigate midwives' perception of their practice environment.

Method:

We performed a mixed-methods study, based on data from a nationwide cross-sectional postal survey in 2014 of 489 midwives who filled out the Practice Environment Scale and replied to 7 open-ended questions. Content analysis, and psychometric-, descriptive- and comparative analysis was used. Data sets were analysed independently and jointly interpreted.

Findings:

Five subscales were identified. Three were rated unfavourable by the majority of the midwives: *Adequate Resources*, *Opportunities for Development*, and *Midwifery Model of Care*. Two were rated favourable: *Supportive management* and *Midwife doctor relations*. Two subscales were similar to subthemes of the content analysis: *Lack of resources* and *Inadequate support from the management*. *The strain of shift work*, a subtheme of *Being a midwife for life* added a new dimension. The subtheme *Requiring professional development* was a subscale in the Practice Environment Scale. The theme *Not being involved in decision making about workplace affairs* was not reflected in

the adapted scale. The subtheme *Increased use of interventions and focus on risks* mirrors the subscale *Midwifery model of care*.

Conclusion:

This study confirmed the psychometric aspects of our adapted Practice Environment Scale. There was considerable overlap and harmony between the subscales and the findings of the qualitative analyses. Midwives perceived facing obstacles and challenges in providing women-centred quality care and staying in midwifery.

Oral Session 3

3.1-Perineal outcomes I

O-3.1.1

Does waterbirth affect the risk of perineal injury or other adverse outcomes in low risk women with physiological birth? Results from the Nordic Homebirth Cohort Study.

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Background:

Waterbirth practice is considered consistent with the midwifery model of care and has become increasingly popular since the early 1980's. Immersion in water has known benefits, such as reducing pain and shortening the duration of labour. The relationship between waterbirth and perineal injury remains unclear. The aim of the study was to compare the risk of perineal injury in waterbirth and land birth among low risk women in four Nordic countries. Secondary outcomes were postpartum hemorrhage and 5-minute Apgar scores < 7.

Method:

Prospective cohort study of 2875 women who planned a homebirth in Denmark, Iceland, Norway, and Sweden in 2008-2013 and had a spontaneous vaginal delivery without epidural analgesia or oxytocin augmentation. Descriptive statistics and logistic regression were used to analyse the data.

Findings:

Of the women in the study group 942 had a waterbirth and 1933 gave birth on land. The groups differed significantly on residence, parity, age, previous obstetric history, birth position, and fetal presentation. Women in the waterbirth group had a lower rate of intact perineum and a higher rate of 1° and 2° perineal tears than did women who gave birth on land. The rates of obstetric anal sphincter injuries and episiotomies were low in both groups. No significant differences in postpartum hemorrhage or 5-minute Apgar < 7 were detected between waterbirths and land births.

Conclusion:

The study adds to the existing body of knowledge on the relationship between waterbirth and perineal injury. Although women giving birth in water are more likely to have spontaneous perineal tears, the increased risk was modest and the rates of more severe perineal injuries were low.

O-3.1.2

Severe perineal trauma among women undergoing vaginal birth after cesarean delivery: a population-based cohort study

Charlotte Elvander

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Background:

To examine risk of severe perineal trauma among nulliparous women and those undergoing vaginal birth after cesarean delivery (VBAC).

Method:

This is a population based cohort study of all births to women with their two first consecutive singleton pregnancies in Stockholm-Gotland Sweden between 2008 and 2014. Risk of severe perineal trauma was compared between nulliparous women and those undergoing VBAC with severe perineal trauma being the main outcome measure. Associations between indication and timing of primary cesarean delivery and risk of severe perineal trauma in subsequent vaginal birth was analyzed using Poisson regression analysis.

Findings:

The rate of severe perineal trauma among nulliparous women and those undergoing VBAC was 7.0% and 12.3%, respectively. Compared with nulliparous women, those undergoing VBAC were significantly older, had a shorter stature and gave birth in a non-upright position to heavier infants with larger head circumferences. The rate of instrumental vaginal delivery among nulliparous women and those undergoing VBAC was 19.3% and 20.2%, respectively ($p=0.331$). An increased risk of severe perineal trauma remained after adjustments among those undergoing VBAC (adjusted risk ratio 1.42, 95% CI 1.23-1.63). Level of risk was not associated with indication (dystocia or signs of fetal distress) of primary cesarean delivery, nor how far the woman had progressed in labor (fully dilated versus planned cesarean delivery) before delivering by cesarean.

Conclusion:

Compared with nulliparous women, those undergoing VBAC are at increased risk of severe perineal trauma, irrespective of indication and timing of primary cesarean delivery.

O-3.1.3

Expert midwives' skill in preserving the perineum intact: the 'MEPPI' study

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Background:

Episiotomy rates are high in Poland and Portugal (68-73%) and low in Denmark, Sweden and Iceland (5-7%). All perineal trauma can cause post-partum pain. In New Zealand, in 2011, and in one centre in Ireland, the episiotomy rate for spontaneous vaginal births for nulliparous women was only 8-9%. A qualitative study was conducted to explore expert Irish and New Zealand midwives' views of the skills they employ in preserving the perineum intact during spontaneous vaginal birth.

Method:

The university granted ethical approval for a qualitative, descriptive study used semi-structured, recorded interviews in Ireland and New Zealand in 2014-15. Twenty-one expert, consenting midwives participated. "Expert" was defined as those who, in all nulliparous women they had cared for in the past 3.5 years, had a 'no-suture' rate (intact perineum/graze/first degree tear) of >40%; episiotomy rate of <11.8 %; and a severe (3rd/4th degree) tear rate of <3.2% (or one tear in 3.5 years). Analysis was by the constant comparative method and data saturation was achieved.

Findings:

Four themes emerged: 'Calm, controlled birth', 'Position and techniques in early second stage', 'Hands on or off?' and 'Slow, blow and breathe the baby out.' These midwives were able to achieve rates, in nulliparous women, of 4% for episiotomy, 59% for 'no-sutures', and 1.08% for serious lacerations, using the skills described.

Conclusion:

Some skills in preserving the perineum intact, that these expert midwives described clearly, are not detailed in midwifery or obstetric text-books and need to be highlighted to improve care during birth. 'Expert' midwives, using these non-interventionist techniques when caring for nulliparous women, can preserve the perineum intact more often than other midwives, without any increase in second-degree or severe perineal tears. Student midwives should be taught these techniques in the clinical skills laboratory and classroom, and encouraged to use them in practice.

O-3.1.4

Midwives' practice during the second stage of physiological labour: A systematic review

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Background:

A midwife's practice can be influenced by education and cultural practices, but ultimately it should be based on current research evidence. It is a research priority, to identify midwifery care that optimises and interrupts the physiological processes for women and their babies during childbirth (Kennedy *et al.*, 2016; WHO 2018). Subsequently, international midwifery researchers (from Northern Ireland, The Netherlands and Sweden) undertook a systematic review of midwives' practice during the second stage of physiological labour, aiming to improve the quality of intrapartum care, inform education and future research.

Method:

Systematic searches of PubMed, EMBASE.com, Cinahl, PsycINFO, Maternity and Infant Care and The Cochrane Library were undertaken initially from inception then, revised from January 2008 to May 2018. MeSH terms were mainly utilised with no language restrictions. Covidence software aided the researchers to comprehensively screen each study (two researchers per full text review). Reference lists were hand searched, data extraction undertaken, and following quality appraisal studies were included. The protocol was registered in the International Prospective Register of Systematic Reviews (PROSPERO; Registration CRD42018088300).

Findings:

The review systematically collated pertinent literature by initially retrieving 10,510 hits. Following analysis and synthesis, findings revealed different midwifery practices relating to care during second stage of labour e.g. birth positions, pushing techniques and care of the perineum. By implementing this evidence, midwives can enable women during second stage of labour to optimise physiological processes to give birth.

Conclusion:

There is a dearth of evidence relating to midwives' practice which provides a positive experience for women during second stage of labour. This may reflect, that not all midwives' practices are researched and documented. This systematic review undoubtedly contributes to formulating global midwifery practice, education and future research recommendations to support high quality intrapartum care for women during second stage of labour.

3.2-Cesarean section

O-3.2.1

Predictors of cesarean in a low-intervention, low-risk population

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Background:

The cesarean rate in middle- and high-resource countries remains significantly higher than is safe or medically necessary. Previous work has identified numerous pregnancy, provider, and hospital characteristics associated with cesarean birth. However, less attention has been paid to identifying psychosocial predictors of cesarean. Without a complete picture of risk factors, cesarean reduction efforts will be incomplete.

Method:

We used data from 56,139 midwife-led, planned community births in the US. We ran one large, unconditional logistic regression model that included more than two dozen maternal psychosocial variables, as well as more than 50 "traditional" risk factors (e.g., breech, gestational age). Our objective was to determine the relative importance of psychosocial versus clinical risk factors.

Findings:

The overall cesarean rate in this sample was 5.5%, all of which occurred following intrapartum transfer from the community (home or birth center) setting to a hospital. The strongest independent predictors of cesarean (defined as $p < 0.05$ in the global model) included clinical (maternal age, postdates, breech, gravidity, parity, history of cesarean, polyhydramnios, placenta previa or abruption, BMI), healthcare-related (number of prenatal visits, pharmacologic or herbal induction, planned place of birth), and psychosocial (maternal race, eligible for low-income health insurance, substance abuse during pregnancy) factors. The next-strongest predictors ($p < 0.10$) again included both psychosocial (maternal education, marital status, food assistance, sexual abuse during pregnancy) and clinical (pre-eclampsia, pregnancy-induced hypertension, single umbilical artery, preterm) factors, but none related to healthcare. The remaining 30+ variables (including pre-existing diabetes, gestational diabetes, and twins) were not associated with adjusted odds of cesarean, after controlling for all other variables.

Conclusion:

Psychosocial factors including race, education, marital status, income, and history of sexual or substance abuse are important predictors of cesarean. Any efforts towards cesarean reduction must consider these as well as healthcare systems and “traditional” clinical risk factors.

O-3.2.2

Maternal physical activity and cesarean birth: a systematic review

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Background:

Maternal physical activity has been studied extensively as a possible intervention for high cesarean rates; our objective was to systematically review this literature.

Method:

We searched the English-language literature for studies reporting physical activity/cesarean (PA/CS) results. We deliberately made our search very broad, suspecting that some PA/CS results would be buried in Table 4, in papers otherwise about predictors of cesarean or sequelae of PA during pregnancy.

Findings:

The initial search yielded 548 articles; 77 are included in this review. We included all papers with PA/CS results, regardless of study quality. The vast majority of results were null, with point estimates suggesting a benefit of PA without reaching statistical significance. Numerous additional papers reported inverse (PA is beneficial) associations, with adjusted odds/risk ratios ranging from 0.9 to 0.5. Only two papers reported a harmful effect of PA on cesarean risk. Only one paper explored physical activity as a continuous variable; >95% used dichotomous active/sedentary comparisons, and definitions of “active” varied widely.

Conclusion:

This literature is rife with small samples and poor PA measurement techniques, rendering firm conclusions difficult. We can say with certainty that there is little evidence that PA is harmful in terms of cesarean risk. This, combined with other known benefits of PA both during pregnancy and generally, support the current practice of encouraging all people, including pregnant ones, to be active. Despite our inability to draw firm conclusions, we posit that the PA/CS research question has out-lived its usefulness, and further efforts along these lines should be discouraged. There is little evidence of harm, and because physical activity is known to be beneficial for nearly every other human health outcome, clinicians and public health professionals will continue to encourage pregnant women to exercise, regardless of the conclusions drawn by any future study of PA and cesarean.

O-3.2.3

Cesarean section on a rise - does advanced maternal age explain the increase? A population register based study

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Background:

The increase in obstetric interventions is a present cause of concern. Interventions may reduce morbidity and mortality, but also impose the risk of adverse events. In Denmark, the cesarean section rate has increased by 49% between 1998 and 2015 and accounts for 21% of all births. Postponement of pregnancy has been suggested as contributing to this increase. During the same period, the proportion of women giving birth at 35 years or above increased from 15% (1998) to 21% (2015). Advanced maternal age at childbirth is related to increased pre-pregnancy morbidity and associated risk factors, that may contribute to increased risk of cesareans.

Method:

A national population based cohort study of all Danish births 1998-2015 (N=1,122,964). Age <30 years serves as reference against age categories: (30-34 years); (35-39 years), and (+40 years). Primary outcome was cesarean

section. Multivariate regression with adjustment for demographic, health, pregnancy, fetal, and obstetric characteristics were performed, stratified by parity.

Findings:

A positive association between advanced maternal age and cesarean section was found. Only minor changes in the risk estimate occurred after adjustment for confounders. In comparison with the reference category, nulliparous aged 35-39 years had an adjusted odds ratio (aOR) 2.18 for cesarean section (95% confidence interval (CI) [2.11-2.26]), whereas for women +40 years, the risk was more than tripled (aOR 3.64, 95% CI [3.41-3.90]). For multiparous aged 35-39 years the risk was aOR 1.56, 95% CI [1.53-1.60], and for those +40 years, the aOR was 2.02, 95% CI [1.92-2.09].

Conclusion:

This study finds of a strong association between increased maternal age and CS. Adjustment for maternal and obstetric risk factors had minor influence on the association. This leads the authors to add culture to the list of risk factors. Also, further research is needed on a possible age-related decrease in the ability to maintain progression of labor.

O-3.2.4

Advanced Maternal age and Cesarean Sections - physiology or culture? A population register based study

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Background:

Evidence finds women at advanced age (>35 years) more likely to have cesarean section (CS) than their younger counterparts. Our aim was to analyze if the high risk of CS among women at advanced age may be an effect of a decreased physiological ability to give birth or a consequence of a birth culture more likely to perform CS when age increase. We hypothesize that risk of CS caused by an age-related physiological incapability will be stable over a time-period of 18 years, whereas a significant change in risk of CS will suggest culture as contributor.

Method:

A cohort study including all Danish births 1998-2015 from the Danish Medical Birth Register (n=1,089,592). The years 1998-99 serves as reference compared to subsequent 2 years intervals. Women at age-group 35-39 and 40+ years were analyzed. We stratified by parity and previous cesarean Primary outcomes were in-labor and pre-labor CS. A multivariate regression model adjusting for demographic, health, pregnancy, fetal, and obstetric characteristics was used.

Findings:

The risk of pre-labor CS increased over time and was 2-3 fold higher by the end of the period. The increased risk was most pronounced among women age 40+ years. E.g. for nulliparous women 35-39 years, the risk of pre-labor CS increased with an adjusted Odds Ratio (aOR) of 2.49 (95% CI [2.05-3.01]) and for age 40+ aOR 2.85 [1.90-4.28]. The risk of in-labor CS remained stable or slightly decreased over time. This pattern was robust in both parity groups.

Conclusion:

The study shows a substantial increase in risk of pre-labor CS over a period of 18 year. This pattern is persistent after adjustment for a wide range of possible confounders. This suggests a strong influence of birth culture with a reduced threshold for performing CS among women at advanced age.

3.3-Intrapartum care for immigrant women

O-3.3.1

Immigrants from conflict-zone countries: an observational comparison study of obstetric outcomes in a low-risk maternity ward in Norway.

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Background:

Immigrants have higher risks for some adverse obstetric outcomes. Furthermore, refugees are reported to be the most vulnerable group. This study compared obstetric outcomes between immigrant women originating from conflict-zone countries and ethnic Norwegians who gave birth in a low-risk setting.

Method:

This was a population-based study linking the Medical Birth Registry of Norway to Statistics Norway. The study included the first registered birth during the study period of women from Somalia (n = 278), Iraq (n = 166), Afghanistan (n = 71), and Kosovo (n = 67) and ethnic Norwegians (n = 6826) at Baerum Hospital from 2006–2010. Background characteristics and obstetric outcomes of each immigrant group were compared with ethnic Norwegians with respect to proportions and risks calculated by logistic regression models.

Findings:

In total, 7,408 women and their births were analyzed. Women from Somalia were most at risk for adverse obstetric outcomes. Compared with ethnic Norwegians, they had increased odds ratios (OR) for emergency cesarean section (OR 1.81, CI 1.17–2.80), postterm birth (OR 1.93, CI 1.29–2.90), meconium-stained liquor (OR 2.39, CI 1.76–3.25), and having a small-for-gestational-age infant (OR 3.97, CI 2.73–5.77). They had a reduced OR for having epidural analgesia (OR 0.40, CI 0.28–0.56) and a large-for-gestational-age infant (OR 0.32, CI 0.16–0.64). Women from Iraq and Afghanistan had increased risk of having a small-for-gestational-age infant with OR of 2.21 (CI 1.36–3.60) and 2.77 (CI 1.42–5.39), respectively. Iraqi women also had reduced odds ratio of having a large-for-gestational-age infant (OR 0.35, CI 0.15–0.83).

Conclusion:

Even in our low-risk maternity ward, women originating from Somalia were at the greatest risk for adverse obstetric outcomes in the compared groups. Several factors may influence these findings, and this study suggests that immigrant women from Somalia need more targeted care during pregnancy and childbirth.

O-3.3.2

Stillbirth in relation to maternal country of birth and other migration related factors: a population-based study in Norway

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Background:

Immigrant women's increased risk of adverse pregnancy outcomes is well known. However, rates varies between women's countries of birth and higher *and* lower rates compared with women in the receiving countries have been reported. There is a need to identify immigrant women in particular need of improved maternity care strategies. The aim of the study was to investigate the associations between migration related factors (maternal country of birth, paternal origin, reason for immigration, length of residence and birthplace of firstborn child) and stillbirth in a Norwegian population based sample.

Method:

Nationwide population-based study including births to immigrant women (n=195 725) and Norwegian-born women (n=1 136 637) giving birth in Norway between 1990 and 2013. Data was retrieved from the Medical Birth Registry of Norway (MBRN) and Statistics Norway. Crude and adjusted odds ratios with 95 % confidence intervals were estimated by means of logistic regression analysis. Adjustments were made for parity, maternal age, marital status, mother's income and level of education, consanguinity and recurrent stillbirth.

The study has gained approval from the Regional Ethic Committee: REF NR: 2014/1278/REK Sør-Øst, Norway.

Findings:

Compared with Norwegian-born women, adjusted odds ratio was increased for stillbirth in primiparous women from Sri Lanka and Pakistan, and multiparous women from Pakistan, Somalia, the Philippines and Former Yugoslavia. A Norwegian-born father to the infant was associated with reduced odds of stillbirth in primiparous women when compared to non-Norwegian-born fathers. Multiparous immigrant women who had given birth to their first child before immigration had higher odds for stillbirth in later births than multiparous immigrant women who gave birth to their first child after immigration.

Conclusion:

Stillbirth risk was increased in immigrant women from Sri Lanka, Pakistan, Somali, The Philippines and Former Yugoslavia. Also paternal origin and birthplace of firstborn child were important risk factors of stillbirth in immigrant women.

O-3.3.3

Global Perspective on Deinfibulation

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Background:

Female genital mutilation (FGM) causes many adverse physical, mental, sexual, and obstetric outcomes. Surgical deinfibulation is a procedure in which the sealed vagina opening is cut open. Surgical deinfibulation after FGM is available but it has been too rarely used although it could reduce the negative impact of FGM.

Method:

The objective of the study was to seek evidence on deinfibulation related practices. Integrative literature review was used as a method for the study. Data search was conducted in December 2017 by using five databases. 22 qualitative and quantitative studies with varying designs were included

Findings:

Women seek deinfibulation for various reasons, pregnancy and health problems caused by FGM being most prevalent. From a health care point of view, themes such as knowledge, management, experience, communication, and clarity and continuity of care were identified as barriers and facilitators. From the viewpoint of women living with FGM, several cultural factors emerged from the evidence.

Deinfibulation is a simple procedure with minor complication. Deinfibulation can reverse some adverse health outcomes caused by FGM. Overall satisfaction for the procedure was good but part of the women have difficulties accepting the new body image.

Deinfibulation performed before or during labour is comparable in the terms of obstetric outcomes although the trend was favourable on deinfibulation performed before labour. Women's preferences of the timing of deinfibulation differs, although most women seem to prefer to undergo deinfibulation during labour.

Conclusion:

Identifying barriers and facilitators, information about the possible benefits and harms, and the best timing of the procedure guides professionals to design services that can respond the needs of women with FGM and supports the creation of practical guidelines. Evidence-based information is important when caring and guiding the women with FGM so that she can make informed choice of her care.

O-3.3.4

Bilingual doula support - a step towards equal rights for immigrant women!

Ulrica Askelöf

Mira, STOCKHOLM, Sweden

Background:

Sweden has received a large number of refugees in recent years. Meta-analyses and systematic reviews show that there is increased risk of adverse pregnancy outcomes for migrant women, such as low birth weight, infant small for gestational age, congenital malformations, stillbirth, neonatal morbidity and mortality. Obstetric interventions are also increased. Furthermore, this group rate their care more negatively compared to non-migrant women, largely due to difficulties in communication, cultural misunderstanding, lack of trust in the Swedish health care system and prejudicial staff attitudes.

Method:

In an attempt to address the problems with adverse pregnancy outcomes and communication difficulties, several initiatives with bilingual cultural interpreters giving doula support, are being tested in Sweden. Scientific studies have shown that continuous support during labour result in greater material satisfaction with care, less use of analgesia, shorter labours, fewer interventions and no adverse effects for women or infants.

In co-operation with Date House Doula & Cultural Interpreter in Gothenburg, we have run the Stockholm based Doula & Cultural Interpreter for two years, financed by the Stockholm County Council. Bilingual women from migrant communities are trained by midwives to give labour support, about physiology, normal pregnancy and childbirth, the importance of breast feeding, the Swedish health care system and women's rights during the perinatal period.

Findings:

The doula is a support person that the woman gets to know in advance of giving birth. Also, the doula encourages women to integrate into society by guiding them towards other support activities such as open pre-schools and primary health care centres. There is no charge for the pregnant woman. The doulas are bound to secrecy.

Conclusion:

We are currently striving to make Doula & Cultural Interpreter permanent in order to secure equal rights and care in connection with child birth.

3.4-Theory of midwifery

O-3.4.1

Objectives and aims of midwifery

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Background:

The defined objectives of a profession allow that profession to explain its actions, to outline what constitutes good quality, and to measure quality. Very few theories of midwifery science exist, and they rarely reveal the objectives and aims of concepts described in midwifery. This study will present a literature-based target hierarchy depicting the objectives and aims of midwifery.

Method:

The method of *theory synthesis* (Walker and Avant, 2011) from nursing science was applied to develop a target hierarchy. A target hierarchy arranges different objectives hierarchically by asking “what is the purpose of this objective?” and “how is this objective achieved?”. Based on existing midwifery science literature, an analytical framework was composed and used to analyse the preferences and experiences of women regarding midwifery care. The scientific perspective on the objectives of midwifery was then compared and combined with women’s practical perspective.

Findings:

A target hierarchy was developed. The hierarchical model described the purpose and objectives of midwifery on three levels. Midwifery care is based on a trustful *relationship*. Based on this relationship there are three operational targets on the second level: *personal control*, *security* and *orientation*. The three operational targets on the second level as well as the trusting relationship itself support the *reproductive capabilities* of the woman. Midwives therefore empower women to construct this phase of life on their own terms.

Conclusion:

This model is a first attempt to depict the aims and objectives of midwifery hierarchically in order to facilitate a discussion about the objectives of midwifery and to make midwifery care measurable across borders. Measurement is a first step to improving quality of midwifery care.

O-3.4.2

Decolonizing Midwifery

Eva K. Robertson

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Background:

This presentation aim to illuminate how the philosophical foundation of modern society and science influences how pregnancy, childbirth and midwifery is approached in biomedicine and how it affects our relation to bodily experiences.

Method:

To investigate the foundation of modern society and science, philosophical publications are analyzed, with an intersectional approach, to illuminate the influences on the concrete (bodily) experiences with applying phenomenology of the body.

Findings:

The modern society is recognized to be developed after 'the discovery of America', the colonialization that included exploitation, extinction, conquest and plunder. It gave European/westernized countries economic conditions to develop modern science, technology, infrastructure and industry. In the modern rational and technological science, attention is given to an instrumental and fragmented perspective, with a clear distinction between the 'knower' and the 'known'. It aims to create generalized theory, recognized as objective and universal with unambiguous definitions through conceptual analyses. It is risking to exclude what speaks to us in a given relationship and situation (also bodily), especially for those living in the intersections of multiple inequalities. Our 'whole' body is an emotional and sensational medium for our being in the world and in relationships to others. It influences and is crucial for how women can trust an organic childbirth with synchronized movements and the natural progress of the functions of their body, their unborn child and the body of the midwife involved.

Conclusion:

In conclusion, in the modern patriarchal society women and their bodies are marginalized and modified. The consequences from the colonialization, with a taken-for-granted epistemological-ontological foundation of modern science needs to be scrutinized. It includes opening up for diversity, recognizing and enhancing respect for the socio-cultural (bodily) organic art of childbirth. It would acknowledge and develop midwifery, decrease iatrogenic consequences with high costs for society and unnecessarily suffering for women and their families.

O-3.4.3

Midwives realities in Bangladesh. A focus group enquiry with midwifery students and educators

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Background:

Identifying existing barriers inhibiting the provision of quality care can guide not only a government in fulfilling its commitment to establishing a midwifery profession but also midwifery educators in preparing their midwifery students for the reality of midwifery clinical work. With professional midwives being introduced in Bangladesh in 2013, the aim of this study was to describe midwifery students and educators' perceptions of midwives' realities in Bangladesh from social, economic, and professional perspectives.

Method:

Data were collected based on the framework "What Prevents Quality Midwifery Care" through 17 focus group discussions with in total 97 midwifery students and educators. Data were analyzed using deductive content analysis.

Findings:

Gendered structures in Bangladeshi society influenced entering midwifery education, carrying out midwifery work safely, and the development of the profession. As a low-income country with a large population, inadequate salaries and staff shortages added extra strain to midwives' working conditions. These barriers were further enhanced due to the midwifery profession not yet being fully established or acknowledged in the health system.

Conclusion:

In order to improve the quality of midwifery care in Bangladesh, efforts are needed on all levels. Addressing unequal gender structures can lower the threshold to entering midwifery education, enable quality midwifery work free from discrimination and vulnerability, and provide sufficient working space and professional integrity. Leadership training is pivotal to increasing responsiveness to the needs of the new cadre of midwives. Midwifery educators can take the lead in sensitizing clinical supervisors, mentors, and preceptors about midwives' realities in Bangladesh. A strengthened professional association can advocate for the professional role and mandate of midwives.

O-3.4.4

Does transition to parenthood affect gender traits? The Effect of Pregnancy on Perceived Female and Male Traits.

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Background:

Gendered identities are strengthened during pregnancy and the early phases of parenthood; women feel more female and men more male. Gendered cultural narratives that further emphasize disparities in parenting roles between the sexes embed this transition period. It has been argued that it is the social practice of mothering, rather than the bodily or emotional experience of pregnancy and childbirth, which yield a traditionalizing influence on women's gender ideologies. There is reason to believe that the effects of pregnancy and childbirth is less apparent in contexts with strong welfare state support for the parents and where gender equality is a societal norm.

Method:

The data comes from a subset of the large-scale Swedish Citizen Panel of the Society, Opinion and Media (SOM) Institute consisting of pregnant respondents or respondents who identify themselves as partners to someone who is pregnant. At two time points, these respondents were asked about the extent to which they have "female" and "male traits". The methodological approach was to explore pregnancy and childbirth as a process and study respondents over time; to compare pregnant women to partners of pregnant women and to compare pregnant women and partners of pregnant women to individuals in the panel who did not become pregnant during the studied period. Data was analyzed by fixed effects panel regressions.

Findings:

Data from 2445 respondents was analyzed. No statistical significant changes in perceived gender traits were found in the respondents' answers between pre-pregnancy and pregnancy; pregnancy and having an infant (<6 months of age); or being a parent of an infant and having a child > 6 months of age. With the exception that men expressed that they had somewhat less female traits postpartum (-0.3, $p < 0.05$).

Conclusion:

Self-perceptions of gendered traits are mainly stable over pregnancy and early parenthood in this Swedish sample.

3.5-Clinical simulation in midwifery education

O-3.5.1

Unexpected learning-potentials among Midwifery students in High-Fidelity Simulation

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Background:

The delivery room is a challenging learning environment for midwifery students, where the woman and her partner is in focus and the students learning potentials develop by having to adapt to every possible situation. In contrast, a simulation delivery room creates a safe space, where none of the involved (Woman, Partner, Child) can be harmed. Simulation Based Education and Learning (SBEL) provides a controlled learning environment where learning objectives and assessment can focus solely on the students' learning and this requires specific didactic methods. We introduce SBEL at the 1st semester in the Midwifery Programme, Copenhagen, and hypothesize that this will strengthen the students' action competence, clinical skills, motivation, confidence and readiness to start their first internship. The aim of this study is to evaluate this approach using both qualitative and quantitative methods.

Method:

We conducted two focus group interviews with 2nd semester students in 2017. Six students participated in each interview; all informants had done their first 7 weeks of their 20-week internship. We asked them to discuss the SBEL training day that took place 2 weeks prior to the internship. The dynamic between participants in a focus group enhances discussion and reflection. Perceptions and experiences of confidence, motivation and the transition from observing to active student can be more detailed in a conversation. The interviews are analyzed using the content analysis and systematic text condensation.

Findings:

At submission stage, data are being analyzed. Preliminary findings show that the interview seems to act as an intervention in itself. The students discussed and identified learning strategies and became aware of how these correlated to learning strategies during their current internship. Results from the interviews will be presented at the conference, including suggestions on how these learning potentials can be integrated in the SBEL in 1st semester.

Conclusion:

Will be presented at the conference

O-3.5.2

Pre-training of suturing skills among midwifery students improves preparedness for training in practice

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Background:

Danish midwifery programmes train students to work independently within normal labour and birth. Though midwifery students have substantial training to work as midwives when they graduate, they still lack competences in suturing independently. Consequently, more experienced midwives need to supervise, which is time consuming in busy labour wards. Learning packages have shown to improve suturing skills among postgraduate midwives but knowledge on student training is sparse. We aimed at gaining knowledge on how workshops in suturing skills in the theoretical part of education prepare students for practice learning.

Method:

Students were taught theoretical insight in basic suturing skills, followed by three workshops, in which they got equipment to train at home between the workshops. Students wrote LOG-books on when, and how much they trained during the period. In the end of every workshop, they were tested using peer testing and peer feedback. We conducted two focus group interviews; one after training during the theoretical module, and one after practicing initial skills in practice.

Findings:

Preliminary findings showed that students trained approximately three hours between the workshops, and improved their competences in basic suturing skills. They were very engaged in their skills training and felt prepared for suturing in a clinical setting. They felt confident in managing the equipment and performing three different knots. After practicing initial skills in clinical practice, they felt that the workshops had helped them to start suturing immediately and to feel confident and "professional" while suturing in the labour ward.

Conclusion:

We need to gain more knowledge how students train and how they transfer knowledge after training in a simulated learning/lab setting. Results and conclusions from the focus group interviews will be presented, including suggestions on how to support an effective transfer of knowledge from theoretical to clinical modules.

O-3.5.3

Inter-professional Full-scale Simulations for Learning Teamwork and Skills for Mastering Obstetric Emergencies

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Background:

Obstetric emergencies occur unexpectedly and some of them are rare. A competent and professional team with good non-technical skills is critical to ensure patient safety. Simulation has turned out to be a safe and effective method of learning non-technical skills and master in medical emergencies. Our objective was the implementation of simulation-training as a method of inter-professional emergency-situation. The main goal was the improvement of non-technical skills with special reference to communication and prioritizing.

Method:

The material was collected after simulation-session. The participants (N=436) were residents in obstetrics, gynecology, and anesthesiology (n¹=115) specialists in obstetrics, gynecology, and anesthesiology (n²=89), midwives (n³=176), midwife-students (n⁴=35), nurses (n⁵=12) and medical-students and amanuensis (n⁶=9). The participants were allocated to inter-professional teams involved in two simulation-scenarios as an actor or an active follower. The simulation-scenarios were obstetric emergencies (dystocia, eclampsia, PPH, resuscitation). A computer-controlled mannequin was utilized. The principles of ANTS were applied. After the simulation-session, the learners completed a facilitator created descriptive post-simulation survey focusing on the learning experiences of the participants.

Findings:

The inter-professional approach was perceived as having provided new viewpoints to clinical work and learning. Participants experienced that their non-technical skills were enhanced. The training of both less and more often

encountered emergencies turned out to be important. Simulations, as a method of learning, were found to be beneficial and suitable for the needs of inter-professional teams. The participant's feedback was similar as 98 % felt they have learned issues with clinical relevance to their daily work, 26% considered that they would change their action in clinical work based on their learning experiences.

Conclusion:

We concluded that the training had effectiveness and participants felt that training must be continued with the same methods. The future aim is to continue simulation-training in obstetric emergencies on a regular basis for the personnel of the clinic of obstetrics.

O-3.5.4

Simulation based examination

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Background:

Simulation-based training has developed rapidly over the past 15 years and has become an established pedagogical method for teaching clinical skills. Since 2009 we have in the capital region of Denmark examined midwife students by using case-based simulation with an actor as the pregnant woman. The simulation resembles reality in the maternity ward to a large degree. The student is tested in a wide range of skills, including theory, clinical skills, craft, and reflection.

Method:

All semesters have specific learning objectives and these form the general frame of the clinical simulation tests. The simulation test has a duration of 30 minutes which includes 10 minutes focusing on either pregnancy or maternity and 20 minutes focusing on birth. To improve clinical skills and prepare for the examination situation the students continuously practice simulation during the semester. They learn how to act in a simulation by performing themselves and watching fellow students. They receive feedback from an experienced supervisor. They practice pathological situations they have not necessarily met and thereby transfer theoretical knowledge to performance. During the examination we use a phantom to illustrate obstetric matters. The actor is a midwife, and her acting is therefore embedded in her knowledge about the field. We have tested the examination method 18 times and it has been evaluated and improved ongoing.

Findings:

The exam

- reflects the clinical education
- is multifaceted
- requires comprehensive preparation
- requires defined guidelines

Conclusion:

The approach aims to reflect the clinical stay and make the exam a natural prolongation of students' learning process.

It includes important aspects of midwifery.

Oral Session 4

4.1-Perineal outcomes II

O-4.1.1

Oneplus - Evaluation of collegial midwifery assistance during the second stage to reduce severe perineal trauma

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Background:

The consequences of severe perineal trauma (grade III-IV) are pain, dyspareunia and anal incontinence. There are still gaps in our knowledge on how to prevent perineal trauma. A new work procedure to reduce injuries has been adopted by approximately 50% of all maternity wards in Sweden. It involves collegial midwifery assistance during the second stage, where an additional midwife is present during the active phase of the second stage and the birth of the baby.

The aim of this study is to evaluate whether collegial midwifery assistance during the second stage reduces severe perineal trauma.

Method:

This is a randomized controlled trial. The primary outcome is severe perineal trauma. The secondary outcome is other types of perineal tears, women's experiences and physical symptoms after one year, and midwives' experiences of the intervention. In 2017 the rate of severe perineal trauma in Sweden among primiparous women was 4.1%. 2946 women will need to be enrolled to detect a 50% reduction in severe perineal trauma from 4.1% to 2.0% with 80% power and a 95% level of significance and allowing for a 40% drop-out rate.

Women expecting their first child or with a prior caesarean section opting for a vaginal birth, from gestational week 37+0 will be included.

Findings:

The study will start in December 2018. Participating maternity wards are Karolinska University Hospital and the maternity wards in Malmö and Lund.

Conclusion:

The number of women seeking care for pelvic floor problems related to childbirth is increasing and preventing severe perineal trauma is important for women. If the new work procedure is effective it can be implemented in all maternity wards in Sweden. On the other hand, if this intervention does not work the way it is intended or has negative side-effects, health care resources can be used more effectively.

O-4.1.2

Risk of perineal tears by maternal birth position

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Background:

Perineal trauma is an often-unavoidable consequence of vaginal birth, but minimizing trauma to the perineum is important for postpartum health. Known risk factors for perineal lacerations include nulliparity, hospital birth (vs. community birth), race/ethnicity, and level of provider experience. Here, we explore how the birthing position of the woman affects perineal trauma in midwife-led, community settings that support physiologic childbirth.

Method:

We used the Midwives Alliance of North America Statistics Project (MANA Stats) dataset, which contains medical records-based data largely from midwife-attended, community (home or birth center) births in the US (2012-2016). We excluded multiple gestations, non-vertex presentations, pharmacologic inductions, hospital deliveries (either planned or following intrapartum transfer from a community setting), or births where episiotomies were performed (final analytic sample = 47,583 births). We examined any perineal tearing as a function of final maternal position for birth of the neonate, controlling for health/demographic covariables via multivariable, unconditional logistic regression.

Findings:

Just over half (51.8%) of women in this sample experienced perineal trauma of some kind. Rates of trauma varied by birth position, ranging from 46.6% (sitting) to 63.5% (hanging). 62.5% of women in lithotomy position experienced perineal trauma, as did 47.8% who pushed in the semi-sitting position. Multivariable analysis to account for maternal health and demographic factors found reduced odds of trauma for semi-sitting (aOR 0.65 [95% CI 0.50 – 0.86]), supine (aOR 0.72 [0.54 – 0.96]), side-lying (0.74 [0.56 – 0.98]), and sitting (0.66 [0.50 – 0.89]) positions, relative to lithotomy. Compared to lithotomy, no birth position had a statistically significant increased adjusted odds of perineal trauma. Additional results comparing location and severity of trauma will also be presented at the conference.

Conclusion:

Rates of perineal trauma varied widely by birthing position. This information could be useful for midwives both in practice and when counseling women ahead of labor.

O-4.1.3

Association between birth positions and perineal trauma following an interventional program during the second stage of birth.

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Background:

It is important that women can choose their birth positions as it both affects the progress of birth and their birth experience. Studies tend to show various results of the association between birth positions and perineal outcome. Various methods have been used to improve perineal outcome but some of them are likely to restrict the birth position women can choose. The aim of the study was to shed light to the association between birth position and perineal outcome after the implementation of an intervention program in the second stage of birth, involving altered perineal support techniques.

Method:

This was a quasi-experimental cohort study. Birth positions were studied in relation to the implementation of an interventional program in the second stage of birth, aiming to decrease a high rate of 3° and 4° tears at Landspítali. All women giving birth vaginally were enrolled in the study during 2012-2014 (n=7242). Data were recorded prospectively. During 2011 an interventional program was implemented, involving all midwives and obstetricians working at the labor wards. Various birth outcomes including, birth-weight, duration of birth, use of oxytocin and birth positions were recorded.

Findings:

The average rate of severe tears was 3,6% after the implementation. The best results were the side-lying (1%, n=755). The most frequently used position was semi-recumbent (n=4207), associated with a 3% rate of severe perineal tears. The highest rate was among women who gave birth in stirr-ups (7%, n=640), in a birthing chair or foot-rest (6%, n=18/n=390), or other undefined positions (5%, n=55).

Conclusion:

Women need to have adequate education on perineal protection before giving birth, allowing them to make their own choice on birth-position. Establishing a good relationship between the mother and midwife might just be the key element for choosing birth-position resulting in good birthing experience and have acceptable perineal outcome.

O-4.1.4

Do more resources lead to improved care and support to women with obstetric anal sphincter injuries? Exploring national, regional and local policies and guidelines in Sweden

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Background:

Sweden has had one of the highest Scandinavian prevalences of obstetric anal sphincter injuries (OASIS). Despite decreasing numbers the last years, regional differences remain. Studies show that affected women may suffer from prolonged health problems caused by their OASIS and they do not easily find the needed help and support for their problems. The recent governmental funding with the aim to strengthen delivery care and women's health in Sweden has resulted in some clinics have prioritized investments in educational and organizational changes to address the prevention and care of OASIS-affected women. But, this also highlights the problem of geographical equality to qualified care— do all affected women get a chance to benefit from these investments?

Method:

National, regional and local policies, documents and care programs addressing OASIS care were assessed and analysed using Carol Bacchi's "What's the problem represented to be" approach; a method to systematically explore and understand how policies work, how problems are articulated and expressed and how governance and policy-making influence practice.

Data collection covering all regions in Sweden is finalized and data analysis starts in October 2018.

Findings:

Findings will be presented at the conference in May, 2019.

Conclusion:

The findings contribute with important knowledge for the development of OASIS-care programs that support OASIS-affected women to better manage their situation and get optimized and equal care after OASIS.

4.2-Labour progress

O-4.2.1

Safe labour, redefining duration of first stage of labour in modern obstetrical care

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Background:

Objective To investigate the duration and pattern of first stage of labour in a large nationwide modern population in Sweden

Design A retrospective cohort study

Setting Electronic medical records of all women delivering in Stockholm and Gotland region between 2008 and 2014

Population 56 392 nulliparous women with a spontaneous onset on labour with singleton infant in cephalic presentation at ≥ 37 weeks of gestation

Method:

A repeated-measures analysis was used to illustrate average labour curves by parity. Interval-censored regression was used to estimate the duration centimetre by centimetre.

Main outcome measures Labour curves and the duration of first stage of labour at the 5th, 50th and 95th percentile.

Findings:

The majority of women had a spontaneous vaginal birth, 70,9%. Epidural was used in 60,3% and 47,3% of the women was submitted to Oxytocin use during labour. Women progress differently during first stage, with faster progression after 5 cm cervical dilatation. No deceleration phase was observed. For the 95th percentile the first stage lasted for more than 18 hours when admitted at 3 cm cervical dilatation. Progress in the 95th percentiles indicates that some women take more than 5 hours to progress to 4 cm when admitted at 3 cm. Median duration of the first stage of labour calculated from 3 cm of cervical dilatation was >6,5 hours. Our 95th percentile depicts a slower progression than described by Friedman's partograph, but a faster progression than presented by Zhang and Oladapo.

Conclusion:

Cervical dilatation is an individual increasing process with a faster progression after 5 cm cervical dilatation in nulliparous. Rigid time limits based on the partograph results in high levels of unnecessary interventions during first stage of labour in modern obstetrical care.

O-4.2.2

'Management of the passive phase of the second stage of labour in nulliparous women- focus group discussions with Swedish midwives'

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Background:

The passive phase of the second stage of labour is defined as full dilatation prior to or in the absence of involuntary expulsive contractions, when the presenting part of the baby descends to the perineum. There is little knowledge concerning the management of this phase when there is a prolonged progress. The aim of this study was to describe Swedish midwife's management of the passive phase of second stage of labour in nulliparous women.

Method:

Seven focus group interviews were conducted at four hospitals and 36 midwives participated in the study. The material was analysed using content analysis.

Findings:

The analysis generated five categories and one main theme. "An important and difficult phase to manage", "To assess and evaluate", "Caring actions and medical actions", "Internal and external effects" and "Cooperating with the couple". The main theme was "Midwifery skills". The midwives stated that management of the passive phase could be complex, especially if the progress was slow. It involved a continuous process of assessing the situation, balancing options for the next step and evaluating the result of their actions. They performed caring actions such as encouragement to change positions to prevent a slow progress and gave continuous support and kept the couple involved in the labour process. Medical actions such as amniotomy or oxytocin augmentation were performed if a prolonged progress was occurring, though the midwives attempted to avoid unnecessary interventions.

Conclusion:

The midwives' management of the passive phase varies depending on different aspects. Their management was based up on the whole situation surrounding the women giving birth, guidelines were taken into account, but every woman was managed individually. The midwives could take on an active, medical management, or accept and trust the normal physiological process of the labour.

O-4.2.3

The Labour Progression Study (LaPS): Intrapartum caesarean section rates following Zhang's guideline and the WHO partograph. A cluster randomised trial.

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Background:

There is an ongoing debate concerning which guidelines and monitoring tools are most beneficial for assessing labour progression to help prevent intrapartum caesarean section (ICS). The main objective of this study was to investigate whether the rate of ICS differed when adhering to Zhang's guideline for labour progression compared to the WHO partograph.

Method:

We conducted a cluster randomised trial including nulliparous women with a singleton, term fetus with cephalic presentation and spontaneous active labour at 14 obstetric units in Norway, with more than 500 deliveries per year. Half of the clusters were randomised to the intervention group adhering to Zhang's guideline and the other half to the control group, adhering to the WHO partograph, stratified by size and prior caesarean section rates. The primary outcome was ICS. Masked analyses of the data were performed. The LaPS Trial is registered at www.clinicaltrials.org (NCT02221427).

Findings:

Between December 1st, 2014, and January 31th, 2017, 7277 of 11.615 eligible women were included in the Zhang group (3972) and the WHO group (3305). The number of ICS were x (x%) and x (x%), respectively (adjusted relative risk x; 95% confidence interval [CI], x to x P=x; adjusted risk difference, x%; 95% CI, x to x). The pre-intervention ICS rate was 9.3% and 9.5% respectively.

Due to strict embargo system with The Lancet, we are not able to present the results when submitting the abstract. The results will be presented at the congress if the abstract is accepted for oral presentation.

Conclusion:

Due to strict embargo system with The Lancet, we are not able to present the conclusion when submitting the abstract.

The conclusion will be presented at the congress if the abstract is accepted for oral presentation.

The results represent an important contribution to the discussion on implementation of the new guideline.

O-4.2.4

'We've become very dependent on the technology': Electronic fetal monitoring and the organization of maternity care

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Background:

Continuous electronic fetal monitoring (EFM) is used in almost all labors in the United States, despite lack of evidence showing clinical benefit for mother and baby and a known high false positive rate that often leads to unnecessary cesarean surgery. The reasons for the persistent use of EFM have not been adequately studied. In this research, we explore the factors maternal healthcare providers consider to be facilitators and barriers to evidence-based use of EFM.

Method:

We organized seven profession-specific focus groups: nurses (n=3), physicians (n=2), and midwives (n=2). 41 providers participated. Sessions were recorded and transcribed for analysis.

Findings:

We identified six themes driving the use of EFM:

Providers as members of healthcare team: working as part of an interdisciplinary team requires navigating differences in interpretation of risk status and deferring to the judgment of others (which allows deflection of responsibility);

Clinical environment: staffing, the culture of the unit, and convenience work together to promote EFM over intermittent auscultation (IA), which requires more nurses and more time;

Technology: Providers lamented the 'lost art' of managing the patient without the monitor;

Policies, procedures, and evidence-based protocols: Evidence-based guidelines and policies for EFM are in place but are not taught, supported, or enforced by hospital administration;

The patient: Most providers noted that women were not asked to give informed consent for EFM and mentioned patient choices, including preference for epidurals and the 'reassurance' offered by EFM, as reasons for its use;

Fear: Concern about litigation and the status of the baby were oft mentioned as justification for use of continuous EFM.

Conclusion:

Interventions to reduce routine use of EFM and promote IA must consider how the organization of maternity care drives provider preferences.

4.3-Breastfeeding

O-4.3.1

Breastfeeding as a balancing act - pregnant Swedish women's voices on breastfeeding

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Background:

Breastfeeding provides health benefits for both women and children. The rationale behind the individual woman's decision whether to breastfeed or not can depend on several factors, alone or in combination. In order to acquire deeper knowledge about how women plan their future breastfeeding, and the kind of support they desire, we performed an interview study, situated in Sweden.

Method:

Eleven mothers-to-be, whereof one with earlier breastfeeding experience, participated in the present study. The women were interviewed by telephone or face to face during late pregnancy, to explore attitudes towards breastfeeding. A semi-structured interview-guide was used, and the transcripts of the interviews were analyzed with thematic analysis.

Findings:

When interviewed during pregnancy women described breastfeeding as *a balancing act between societal norms and personal desires*. The women perceived a societal pressure to breastfeed, yet with boundaries and mixed messages. This perceived pressure was balanced by their own knowledge about breastfeeding, specifically

knowledge of others' experiences of breastfeeding. When envisioning their future breastfeeding, the women made uncertain and preliminary plans, and negotiated benefits and obstacles of breastfeeding. There was a wish for individual breastfeeding support and information.

Conclusion:

The participating women described a balancing act between societal norms and personal desires when interviewed about breastfeeding during pregnancy. When thinking of the future breastfeeding period, the women found societal norms as conflicting, and as exerting a certain pressure. The women's balancing act between societal norms and personal desires, and their wish for information should be taken into account when planning for interventions during pregnancy in order to meet women's needs for individual breastfeeding support.

O-4.3.2

The impact of two-sided benefits. An Interpretative Phenomenological Analysis of young primiparous mothers' breastfeeding experience

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Background:

Primiparous and young mothers have shorter breastfeeding durations compared to other mothers. Predictors of breastfeeding durations thereby reveal an inequity in health as breastfeeding is beneficial for the health of both mother and child. Insight into young primiparous mothers' breastfeeding experiences can add to an understanding and inform interventions focusing on reducing this inequity. This study's aim was to explore young primiparous mothers' breastfeeding intentions and experience.

Method:

The qualitative method Interpretative Phenomenological Analysis (IPA) was used to analyze semi-structured interviews with 12 Danish primiparous mothers between 18 and 24 years, who had initiated breastfeeding after delivery of a term infant.

Findings:

Generally, the mothers' breastfeeding intentions were in accordance with the Danish Health Authorities recommendations for exclusive breastfeeding. Four themes were identified: 1) The impact of norms, 2) The impact of sociality, 3) A focus on competencies, and 4) The essential Motherhood. The complexity of breastfeeding was manifest in the interactions between breastfeeding experiences and related feelings constituted under the four themes. Breastfeeding experiences that led to positive feelings facilitated a continuation of the breastfeeding period. It was found crucial to positive feelings about breastfeeding that the mothers experienced two-sided benefits: 1) That breastfeeding involved a feeling of positive bonding with the child and 2) That the child was experienced to benefit nutritionally from the breastfeeding. Barriers hindering the experience of these benefits could induce negative feelings towards breastfeeding and compromise the intention to breastfeed exclusively for six months.

Conclusion:

It is crucial for young primiparous mothers' initiation and maintenance of breastfeeding to experience benefits related to both bonding and nutritional values. Health professionals' facilitation of this two-sided benefit might therefore increase effectiveness of their breastfeeding support and thereby contribute to reduce inequities in health.

O-4.3.3

Breastfeeding Experiences among Obese Women in Sweden a Qualitative Study

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, Sweden

Background:

Studies have shown that obese women may have less antenatal intention to breastfeed, and shortened duration of breastfeeding compared with normal-weight women. This may result in adverse short- and long-term health for child and mother. It is important to gain more understanding of obese women's experiences of breastfeeding in order to offer person centred health care. Aim: to identify and describe obese women's experiences of breastfeeding.

Method:

It's an explorative study. Data collection was made by semi-structured interviews with 11 obese women with breastfeeding experiences. The interviews were performed 2-18 months after childbirth and they were recorded and transcribed verbatim. Thematic analysis was used.

Findings:

Three themes emerged from the analysis: *Breastfeeding - a part of motherhood, the challenges of breastfeeding, and support for breastfeeding*. Breastfeeding was seen as promoting the attachment between mother and child and the women had an antenatal hope for breastfeeding. They were fascinated of the body's ability to produce milk, and the breast milk was seen as the best way to feed the child. To breastfeed was described as a challenge even though it is natural. The challenges concerned technical difficulties such finding a good body position for the woman and helping the child to achieve an optimum grip of the nipple. The exposure of the body connected to public breastfeeding was another challenge. Support of breastfeeding was about the importance of being confirmed as an individual behind the obesity, instead of an individual with obesity, and to obtain individual professional support.

Conclusion:

Breastfeeding was experienced as a natural part of being a mother. There were practical challenges for obese women concerning how to manage breastfeeding and how to handle the public exposure of the body. There was a need for realistic information about breastfeeding concerning both the child and the woman.

O-4.3.4

Two-year test-retest reliability of the Pregnancy Risk Assessment Monitoring System (PRAMS) breast feeding questions

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Background:

Though a large literature exists on sequelae of breast feeding, studies on this topic rely heavily on maternal self-reported infant feeding behaviors. Little is known about the reliability of these reports.

Method:

We used data from Oregon PRAMS (3.3 months postpartum) and PRAMS-2 (25 months) to assess test-retest reliability of maternal self-reported breast feeding behavior. We assessed reliability of ever/never breast feeding, as well as reported age at weaning for women weaned prior to 3.3 months.

Findings:

The positive and negative predictive values for ever/never breast fed, assuming 3.3-month PRAMS responses were accurate, were 97% and 35%, respectively. The sample-wide kappa for duration of breast feeding was 0.014, with PRAMS-2-reported durations being universally longer (by 1-2 months). Married and more well-educated women gave slightly more reliable responses.

Conclusion:

Single-item, ever-breast fed questions may underestimate the true proportion of women who initiated breast feeding. Among women who wean prior to 3-4 months, 2-year test-retest reliability of breast feeding duration is poor. These findings contradict what has been previously reported in the literature. Potential explanations for this discrepancy are many, but probably relate to differences in infant feeding cultures and accompanying social desirability biases. Researchers using PRAMS data should be aware of the potential issues with the breast feeding data.

4.4-Midwives' wellbeing

O-4.4.1

The emotional and professional wellbeing of midwives: cross sectional survey in Lithuania

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Background:

Midwife's roles in Lithuania have gone through a significant transformation in past 25 years. Nowadays the midwife is an autonomous health care professional who is actively supporting women in physiological labour, participating in the care of pregnant women and newborns and providing consultations regarding family planning and the parenthood skills. Given the importance of the midwife, establishing and ensuring psychological wellbeing becomes an essential component of strategies to sustain healthy workforce and retain midwives in local practice. Aim of the study: to evaluate the emotional and professional wellbeing of midwives.

Method:

A cross-sectional descriptive study was undertaken with a convenience sample of 338 hospital midwives recruited from across Lithuania. Emotional and professional midwifery wellbeing was evaluated via a survey combining the Copenhagen Burnout Inventory (CBI) and Depression Anxiety Stress Scale-21 (DASS-21). The study was approved by the Regional Bioethics Committee at the Lithuanian University of Health Sciences.

Findings:

Midwives who were older than 45 years, worked in mixed shifts (day, afternoon and night) and were satisfied with their personal and professional life were less anxious, less stressed and less depressed. Midwives younger than 45 years old experienced greater levels of burnout both in personal and patient activities-related fields than older midwives. Patient-related burnout was less common among midwives with degree level university education. However, midwives who worked in mixed shifts statistically significantly experienced a greater work-induced burnout, more dissatisfaction with work-life balance and endured statistically significantly greater personal and patient activities-associated burnout.

Conclusion:

Social- demographic and work-related factors such as age, education, type of shift as well as life and work satisfaction correlated with anxiety, stress, depression and burnout of various origins. This is the first study to investigate the emotional and professional wellbeing of midwives in Lithuania. It provides important information for ensuring the future wellbeing of midwives.

O-4.4.2

I was completely exhausted and I could not keep on: midwives experience of attending acute circumstances during birth

Sigfridur Inga Karlsdóttir
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Background:

Studies indicate that between 10 - 40% of healthcare professionals that have dealt with serious incidents during work suffer both mentally and physically after the incident.

Method:

The study, aims to shed light on midwives' experiences of serious incidents during childbirth with regards to the effects they have on their wellbeing. Qualitative, retrospective study and a phenomenological approach was used and a purposeful sample of 15 midwives all of whom were working in labour wards. The midwives were interviewed individually and the data was analysed according to Colazzi method.

Findings:

Five main themes were identified: psychological effects, long term effects, helpful things, what was not helpful and ideal service. Findings show that attending acute circumstances during birth is a traumatic experience. Midwives often think about quitting their job, especially the day the incident happened and for some days they feel that the incidence stayed in their mind all the time. They had trouble sleeping and they felt that they were not able to enjoy being with their family as much as usual. Some of them described how the incidence affected their wellbeing years after it happened. Support from other midwives, meeting with colleagues to go through the incident and knowing that they had done everything they could, was helpful. Furthermore, taking care of the parents afterwards and that everything went well also helped. On the other hand cruel words and no support from their head-midwife and other midwives did have negative effects on their wellbeing. When they talked about the ideal service support and meetings shortly after the incidence was crucial.

Conclusion:

Administrators at labour wards must bear in mind how attending serious incidence in birth can have on midwives wellbeing and what kind of support can be helpful to improve their health.

O-4.4.3

Burnout and intentions to leave the profession among Western Canadian midwives: Is the caseload model sustainable ?

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Background:

Western Canadian midwives exclusively practice case load midwifery, providing continuity of care throughout pregnancy, birth and the postpartum period.

Midwives are at high risk for burnout and occupational stress and this has implications for workforce retention and quality of maternity care.

As midwifery expands in Canada, it is important to understand how burnout and occupational stress are experienced by midwives, and whether burnout is linked to midwives' intentions to leave the profession, and other factors.

Method:

Midwives were invited to participate in the international WHELM (work, health, and emotional lives of midwives) survey through invitations via their professional organizations. The survey included demographic questions and emotional wellbeing scales such as the Copenhagen Burnout Inventory and the Depression, Anxiety, and Stress Scale.

Findings:

One in three Canadian midwives had seriously considered leaving the profession (34.7%), citing reasons such as the negative impact of an on-call schedule on personal life (84.8%), as well as concerns about their mental (80.8%) and physical health (57.6%). One in two midwives scored in the moderate to severe range on the work subscale, and two in three scored in the moderate to severe range on the personal burnout subscale. Burn out scores were higher among midwives who planned to leave the profession, midwives with young children, those with higher caseloads and fewer days off. Quality of life was significantly lower among midwives who reported higher burnout scores. Midwives suggested many strategies to reduce stress, such as part time work options, support for sick days/vacation coverage, more pay per course of care, more off-call career opportunities and initiatives to reduce bullying and interprofessional conflict.

Conclusion:

The current study identified many occupational stressors that are unique to the caseload model. Findings from this study can inform policies and strategies to support the growth and sustainability of caseload midwifery in Canada.

O-4.4.4

Promoting and sustaining a healthy midwifery workforce - key messages from the Work, Health and Emotional Lives of Midwives (WHELM) consortium

Mary Sidebotham

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Background:

Midwives are key to providing safe maternity care with increasing evidence around the benefits of continuity of midwifery care(1, 2). Supporting and sustaining the health and wellbeing of the midwifery workforce is essential. There are reports of emotional distress within the midwifery workforce across different jurisdictions (3-7) leading to reports of midwives seeking to leave the profession. Identifying prevalence and understanding the factors contributing to this distress is key to developing supportive strategies.

Method:

The WHELM survey was developed by researchers in Australia (8). The survey consists of validated psychometric tools, country specific demographic and workforce data, fixed response and free text questions. Data from fixed response questions and embedded psychometric tools are analysed using descriptive and inferential statistics using the SPSS program. Free text questions are analysed using thematic content analysis. The WHELM survey has been designed to be delivered online to reach large numbers of midwives enabling researchers to gain an overview of the emotional health and employment intentions of midwives within any jurisdiction.

The survey tool has been modified and used across a number of countries since its early development in 2013.

Findings:

Selected results from the published Australian and New Zealand studies (3,4,7) will be presented including prevalence of burnout, depression, anxiety and stress in order to identify the major discussion points

Conclusion:

Since publication of early results using the WHELM survey (3,4,5,7,8), researchers from across Australasia, Europe and North America have made a commitment to work together to identify strategies to promote the emotional wellbeing of the midwifery workforce. Key messages from aggregated results will be presented to promote discussion and debate. The focus of this presentation will be focussed on moving forward and addressing how we can use the results to identify strategies to promote wellness. This will include discussion around an increased commitment to international collaboration.

4.5-Midwifery education in India & Bangladesh

O-4.5.1

Strengthening nursing and midwifery pre-service education in four Indian states

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Background:

A three-year intervention (2014-2016) aimed at strengthening pre-service education (PSE) in four Indian states of Bihar, Rajasthan, Madhya Pradesh and Odisha funded by Norway India Partnership Initiative (NIPI) to quality of improve the quality of PSE nursing and midwifery cadre and thereby strengthen the delivery of high impact maternal, newborn, child health (MNCH) and family planning interventions at the facility and community level. The intervention included imparting a 6 weeks customized training at all 133 auxiliary and general nursing midwifery training centres and establishment of State Nodal Centres (SNC). Our study aims to document a qualitative evaluation of the intervention.

Method:

The evaluation was carried out using qualitative methods. A “contribution analysis” was performed using qualitative approaches involving the selection of two tutors from each training institute and the use of in-depth interviewing (IDI). Data were collected in two each of auxiliary and general nursing and midwifery training centres and one SNC that were randomly selected from each state resulting in 40 IDIs.

Findings:

The results included reports of tutors supervising students in clinical practice areas, previously unseen. Virtual classes provided by experts were also reported significantly helping 2nd year midwifery students and training centres library received around 4000 books which helped students who couldn't afford to buy along with access to international journals. One SNC reported an increase from 5 to 20 computers. Tutors have given specific recommendations including continued refresher training, supervision, financial support; supply of training equipment and consumables; and most importantly recruitment of more tutors for sustaining the changes made through this intervention.

Conclusion:

This intervention has made some essential changes in improving quality of PSE, but continued support is essential for sustainability. Involving nursing and midwifery personnel will ensure that their recommendations are tailored in from the beginning of future interventions.

O-4.5.2

Nurse mentorship: Exploring an alternative career pathway for nurse-midwives in India

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Background:

Nurse mentorship is an upcoming stream in India which pays well compared to other domains of nursing & midwifery. There is scope for nurse-midwives to continue mentoring as at least 6 Indian states are implementing nurse mentoring but little understanding of it as a career pathway. We therefore explored: 1) Nurse mentorship as an alternative career pathway in India; 2) Nurse mentor's perspectives about mentoring and their willingness to continue working as mentors.

Method:

A qualitative exploratory study was conducted in Bihar, India. Semi-structured questionnaires were used for interviews with nurse mentors and policymakers. Nurse mentees were interviewed to understand role of mentors. 16 mentors were selected by convenient sampling and 6 policy makers from implementation body and government were selected by snowball sampling. Data was analysed using framework analysis.

Findings:

Nurse mentoring involves upskilling in-service nurses with more clinical and theoretical sessions for 6-9 months. Approximately 150 nurse-midwives were engaged and retained as mentors in Bihar. Mentors described it as a great learning experience involving research, facility readiness, capacity building within the hospital set up with the existing resources. Generous remuneration and an opportunity to make direct impact in care provision were the key supporting factors. Lack of basic amenities at hospitals & frequently traveling to remote areas were the main challenges. Nurses wanted to continue mentorship but are unable. Indian Nursing Council does not consider mentorship as relevant experience for higher education.

Conclusion:

Mentoring is an innovation aimed to improve maternal and neonatal health service provision. This is a well-paying opportunity compared to other domains of nursing and midwifery in India. There is scope for nurse-midwives to continue mentoring in at least 6 Indian states. Should INC consider mentoring as a domain of practice, it will be motivating for nurse-midwives and in long-term reduce care provider migration.

O-4.5.3

Capacity building of midwifery faculty to implement a 3-years midwifery diploma curriculum in Bangladesh: A process evaluation of a mentor-ship program

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Background:

When a midwifery diploma-level programme was introduced in 2010 in Bangladesh, only a few nursing faculty staff members had received midwifery diploma-level. The consequences were an inconsistency in interpretation and implementation of the midwifery curriculum in the midwifery programme. To ensure that midwifery faculty staff members were adequately prepared to deliver the national midwifery curriculum, a mentorship programme was developed.

The aim of this study was to examine feasibility and adherence to a mentorship programme among 19 midwifery faculty staff members who were lecturing the three years midwifery diploma-level programme at ten institutes/colleges in Bangladesh.

Method:

The mentorship programme was evaluated using a process evaluation framework: (implementation, context, mechanisms of impact and outcomes).

An online and face-to face blended mentorship programme delivered by Swedish midwifery faculty staff members was found to be feasible, and it motivated the faculty staff members in Bangladesh both to deliver the national midwifery diploma curriculum as well as to carry out supportive supervision for midwifery students in clinical placement. First, the Swedish midwifery faculty staff members visited Bangladesh and provided a two-days on-site visit prior to the initiation of the online part of the mentorship programme. The second on-site visit was 2-5 days long and took place at the end of the programme, that being six to eight months from the first visit.

Findings:

Building on the faculty staff members' response to feasibility and adherence to the mentorship programme, the findings indicate opportunities for future scale-up to all institutes/collages providing midwifery education in Bangladesh.

Conclusion:

It has been proposed that a blended online and face-to-face mentorship programme may be a means to improving national midwifery programmes in countries where midwifery has only recently been introduced.

O-4.5.4

Capacity building midwifery educators in Bangladesh through a blended net-based master's program in the subject of midwifery from Dalarna University, Sweden

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Background:

In this study we describe the capacity building of midwifery educators in the subject of midwifery, using foreign expertise from Dalarna University, Sweden in facilitation of a creative learning environment for midwifery students in the context of Bangladesh. The first batch midwifery educators graduated in December 2017 with a one-year master's degree in SRHR from Dalarna University. The *aim* of this study was to describe the feasibility of capacity building midwifery educators in Bangladesh through a blended net based and face-to-face master's program in SRHR.

Method:

Using WHO Midwifery educator core competencies "theoretical learning" domain as conceptual framework for gathering and analysis of data.

Findings:

Access to Internet was a pre-requisite for the midwifery educators' ability to attend the blended net-based masters' program. The main findings of this study was the disclosure of how the midwifery educators incorporated different online activities in the educational/learning strategies to promote active learning for their midwifery students. Using technologies and applications for selection of effective teaching and learning resources was important. The midwifery educators own skills in using technologies and applications for selection of effective teaching and learning resources increased during the first year of studying the master's education at Dalarna University. The most notably increases in their perception of their own skills is in regards to using learning platform, discussion forums, e-mails and watching video clips online.

Conclusion:

In *conclusion*, the midwifery educators used different learning styles with recognition of unique learning needs for their midwifery students' learning. The WHO Midwifery Core competences can guide the outline of a training of trainers' strategy.

Oral Session 5

5.1-Perineal outcomes III

O-5.1.1

A worse nightmare than expected' - a Swedish qualitative study of women's experiences two months after obstetric anal sphincter muscle injury

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Background:

Perineal damage after childbirth has increased and Sweden has the highest prevalence of obstetric anal sphincter injuries (OASIS) among the Nordic countries. Research findings show a variety of complications and negative consequences on women's lives due to OASIS at childbirth. However, the voices of affected women are seldom heard and few qualitative studies have addressed their experiences. This study explored women's experiences of obstetric anal sphincter injury (OASIS) the first two months after childbirth with a focus on problematic recovery

Method:

Data consisted of written responses on open-ended questions focusing on recovery two months postpartum were excerpted from the Perineal laceration register; a Swedish national quality register. Women with a third and fourth degree anal sphincter injury were included, in total 1248 women who had presented short to comprehensive responses. An inductive qualitative content analysis was used for analysis of data

Findings:

The identified theme "A worse nightmare than expected" illustrated women's experiences of their life situation two months after childbirth. The pain was a constant reminder of the trauma, and they had to face physical and psychological limitations as well as crushed expectations of family life. Challenges to find appropriate help within healthcare services, added further stress to an already stressful situation

Conclusion:

Women with problematic recovery two months after OASIS revealed a stressful situation with extensive pain resulting in physical and psychological limitations, and crushed expectations of family life and challenge to find the needed help and support for their health problems. There is a need for clear organizational structures and information to guide help-seeking women to needed care. Improved patient information for women with OASIS are also needed to support and ease their situation.

O-5.1.2

'Struggling to settle with a damaged body' - a Swedish qualitative study of women's experiences one year after obstetric anal sphincter muscle injury (OASIS) at childbirth

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Background:

Thousands of women in Sweden have obstetric anal sphincter injuries (OASIS) each year after vaginal childbirth. These injuries have extensive short- and long-term suffering and may be regarded as neglected health problems in research and clinical practice. This study aimed to explore the women's experiences related to recovery after obstetric anal sphincter muscle injuries (OASIS) one year after the childbirth.

Method:

This is a qualitative study based on written responses, by 625 women about one year after childbirth where OASIS occurred. Data was obtained from a questionnaire distributed by the national Perineal Laceration Register (PLR) in Sweden. Inductive qualitative content analysis was applied for analysis.

Findings:

The theme "*Struggling to settle with a damaged body*" indicated that first year after OASIS was a struggle to settle and accept living with a changed and sometimes still wounded body. Many participants described problems related to a non-functional sexual life, physical and psychological problems which left them with feelings of being used and broken and increased worries for their future health and pregnancies. However, some women had settled with their situation, had moved on with their life and felt recovered and strong. Encountering a supportive and helpful health care professional was emphasized as vital for the recovery after OASIS.

Conclusion:

This study provides important insights on how women experienced their recovery about one year after having had OASIS at childbirth where many women still struggled to settle with their damaged body. There is a need for clear pathways within the health care organization to appropriate health care; services that address both physical and psychological health problems of women with prolonged recovery after OASIS.

O-5.1.3

Uptake of postpartum check-up and perineal pain during the first year after childbirth, a Swedish cohort study

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, Sweden

Background:

Perineal pain is an obstetric complication commonly occurring postpartum. The objective of this study was to investigate primiparas' experiences of perineal pain during the first year after childbirth, as well as to investigate the rates of postpartum check-up attendance, gynecological examination, pelvic floor assessment and exercise advice.

Method:

The primary outcome in this study was women's self-reported perineal pain at three, six and 12 months after birth. Secondary outcomes were uptake of postpartum check-up 6-12 weeks after birth and some aspects of that visit. A postal questionnaire was completed one year after birth.

Findings:

A total of 466 women (78%) completed the questionnaire. The majority of women with severe perineal injuries (70.6%), and 43.7 percent of those with moderate injuries suffered from perineal pain three months postpartum, while 52.9 percent with severe injuries and 19.8 percent with moderate injuries still had perineal pain six months after birth. The postpartum check-up was attended by 90.6 percent. However, one out of four had not been given a pelvic examination or advised about pelvic floor exercises.

Conclusion:

Many primiparas suffer from perineal pain during the first year after birth. The severity of perineal injury affects the experienced pain. One out of ten women has problems with perineal pain one year postpartum. It is essential to investigate and recognize the impact of perineal pain on women's daily life and psychological and emotional wellbeing.

O-5.1.4

BUILD PROFESSIONAL COMPETENCE AND EQUIP WITH STRATEGIES TO EMPOWER MIDWIFERY STUDENTS - an interview study evaluating a simulation-based learning course for midwifery educators in Bangladesh

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Background:

Professional midwives are fundamental to deliver sexual, reproductive, maternal and new born healthcare of good quality. As a strategy to improve such healthcare quality, the Government of Bangladesh has implemented strategies to improve the availability of professional midwives. An identified challenge is the lack of competent midwifery educators to meet global standards core competences for midwifery faculty in Bangladesh.

Use of simulation-based learning in midwifery education programmes is crucial.

As midwifery educators in Bangladesh did lack competence in using such pedagogical method in teaching, they were invited to participate in a simulation-based learning course. In this paper, we present a study on the usefulness of the course.

Method:

Semi-structured individual interviews were conducted with 17 out of 28 midwifery educators participating in the course and data was analysed with inductive content analysis.

Findings:

The study findings show that the conducted simulation-based learning course for midwifery educators in Bangladesh was useful. It "builds the professional competence as midwifery educators" and "equips with strategies to empower midwifery students".

Conclusion:

The findings concluded that a simulation-based learning course should be included in pre-service education in settings where the capacity of midwifery educators is aimed to be strengthened. However, without continuous in-service trainings, the midwives' competence will fade and this will threaten the outcome of midwifery education and the midwifery profession. Thus, the establishment of contextualized in-service simulation-based education based on core competencies for midwives is necessary. Simulation based learning for midwifery educators is one strategy to secure that future midwives are well educated in providing evidence based quality midwifery care. To simultaneously implement and evaluate pre- and in-service education should be next activity in the struggle to increase maternity care services. This could preferable be conducted in partnership with midwifery experts from a country where the midwifery profession is well established.

5.2-Violence in childbirth

O-5.2.1

History of sexual violence associated with frequent attendance in midwifery-led care

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Background:

An adequate number of prenatal visits is beneficial to the health of both mother and fetus. The WHO recommends at least 8 prenatal visits during 41 weeks' gestation. In the Netherlands, guidelines recommend an average of 13-15 visits. Daily practice, however, shows that particularly vulnerable women, e.g. women with psychosocial problems, attend the midwifery practice more frequently. This study examined the factors associated with frequent attendance (FA) in midwifery-led care.

Method:

A cross-sectional study was conducted among low-risk women who received prenatal care solely in a midwifery practice in a medium-sized city near Amsterdam in 2015 and 2016 (N=560). We collected data on potential determinants of high use of prenatal care from the digital files. Logistic regression models were used to estimate the likelihood of FA compared to the recommended number of visits. The number of visits was measured by the revised Kotelchuck-Index, based on the number of visits recommended by the Dutch guideline and adjusted for gestational age, and grouped into adequate plus (FA) and adequate care.

Findings:

The prevalence of FA among pregnant women was 20% (110/560), mainly due to worries and/or vague complaints (59%;65/110) followed by psychosocial problems (9%;10/65). Unadjusted logistic regression showed a relation between FA and deprived area, assisted start of the pregnancy, smoking, overweight, history of sexual violence, and consultations with an obstetrician. Adjusted analyses showed that FA was significantly associated with consultation with an obstetrician (OR=3.99 (2.35-6.77)) and a history of sexual violence (2.17 (1.11-4.24)).

Conclusion:

In our study, frequent attendance in midwifery-led care is more prevalent in a specific group, namely women with a history of sexual violence. As known, a history of sexual violence is underreported in healthcare, therefore we suggest midwives ask frequent attenders about sexual violence twice during pregnancy.

O-5.2.2

Struggling to survive for the sake of the unborn baby

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Background:

Intimate partner violence (IPV) during pregnancy is a serious matter, which threatens maternal and foetal health outcome. The purpose was to develop a grounded theoretical model of women's experience of IPV during pregnancy and how they handle their situation.

Method:

Ten in depth interviews with women who had experience of IPV during pregnancy were analyzed according to Grounded theory.

Findings:

The core category 'Struggling to survive for the sake of the unborn baby' emerged as the main concern for the survivors of intimate partner violence during pregnancy. The core category also reveals how the survivors handle their difficult situation. The theoretical model demonstrates how the pregnant women feel when '*trapped in the situation*' and cannot find their way out. The model confirms the destructive togetherness were the pregnant women are '*exposed to mastery*' by the perpetrator's behavior which jeopardizes the safety of the woman as well as the unborn child. Additionally, the survivor's experience of gradual degradation demonstrates '*degradation processes*' as a result of the relationship with the perpetrator. The survivor's health and well-being gradually degrades because of the relationship with the perpetrator.

Conclusion:

The theoretical model "Struggling to survive for the sake of the unborn baby" highlights survival as the pregnant women's main concern and explains their strategies for dealing with the violence during pregnancy. The results may provide a deeper understanding of this complex matter for midwives and other health care providers. In fact violence exposed pregnant women are prone to stay in the relationship during pregnancy in order to protect their unborn baby. There is a clear need of identifying violence exposed pregnant women to offer support for example to navigate among possible services and authorities. Collaboration between different authorities is crucial and must be smooth and seamless for the violence-exposed women.

O-5.2.3

Does the violence continue after the baby is born?

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Background:

Background: Domestic violence (DV) is a global health problem. The *aim* of this study was to explore prevalence and incidence of DV during pregnancy and up to 1.5 years postpartum. Also, to explore the history of violence among becoming and new mothers in the southwestern region of Sweden. Furthermore, the aim was to explore the association between DV postpartum and possible risk factors.

Method:

A longitudinal cohort-study. Total 1939 pregnant women participated and answered three questionnaires (QI-III) during pregnancy and postpartum. Statistical analysis was descriptive statistics, logistic regression and multiple regression with Odds ratios (OR) and 95% confidence intervals (95% CI).

Findings:

Results: The response rate for those who received the Q-III (n=755) at a Child Welfare Center was almost 97 % (n = 731). When all three questionnaires were answered the prevalence of DV during pregnancy irrespective of type or severity was reported by 2.5 % (n = 40/1573). At 1-1.5 years postpartum the prevalence of DV was 3.3 % (n = 23/697). The incidence was 14 respectively 17.2 per 1000 women during pregnancy and postpartum. The strongest risk factor for DV reported at 1.5 years postpartum was a *history of violence* whereby all of the women (n = 23) who had revealed exposure to DV also reported a *history of violence* (p < 0.001). Being *single/living apart* gave 12.9 times more risk for DV postpartum (AOR 12.9; 95% CI: 4.5-37.1). Having *several symptoms of depression* and a *low score on the SOC-scale* gave 3.5 respectively 3.0 times more risk (AOR 3.5; 95% CI: 1.2-10.4) and (AOR 3.0; 95% CI 1.1-8.3).

Conclusion:

DV increases as the pregnancy develops and 1,5 years postpartum. A history of violence and being single/living apart may be strong indicators for DV during pregnancy and postpartum. Also, having symptoms of depression are associated with DV both during pregnancy and postpartum.

O-5.2.4

A genealogy of obstetric violence and its implications for mothers' and midwives' subjectivities

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Background:

Neither maternity nor midwifery is theorized in Western philosophy, that has strikingly little to offer with regard to the meaning, subject-theory and ethics of childbirth. This is problematic, since it upholds the exclusion of pregnancy, maternity and midwifery from the predominant conceptualizations of human subjectivity, which grasp the human as clearly demarcated from others.

The conflict between this dominant line of thought on 'singular subjectivity' and the lack of thought on, but very demanding and vulnerable reality of, 'birth-giving existence', affects women's and midwives' subjectivity, and the practice of childbirth, for it makes this practice wherein the 'subject-roles' of woman, unborn baby and midwife are involved as radically intertwined, ethically and existentially difficult to understand. One of the various consequences of this failure in understanding these subjectivities, responsibilities, and boundaries, is disrespectful maternity care, which is the case-study of this paper.

Method:

Through investigating the occurrence of obstetric violence, the subjectivities of the woman and the midwife are traced genealogically via the work of Murphy-Lawless, Chadwick, Duden, Foucault, Nietzsche and Federici. A genealogical method challenges us to transcend a mere descriptive level of a problem, to a level of critique which enhances the possibility of change.

Findings:

The labouring woman subjected to obstetric violence, is characterized by a fundamental lack of subjectivity. The subject of the midwife became caught up with obstetric ideology; she balances in between being a medical authority,

and being fundamentally intertwined with the pregnant subject, like a maternal figure. Obstetric violence makes this internal division stronger, resulting in alienation.

Conclusion:

Obstetric violence is destructive for the subject of both mother and midwife. If midwifery is to be a sustainable profession, obstetric violence needs to be theorized thoroughly by doing justice to all the subjects involved, so solutions can be found to stop it completely.

5.3-Place of birth

O-5.3.1

Women on the move, a search for preferred birth services

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Background:

PERISTAT, the European organization that monitor Perinatal Health, states that concerns over high interventions rates has put normal birth firmly on the agenda for the 21th century.

Women and midwives travel long distances and even cross borders to receive or provide preferred birth services. Travel for birth services is not represented in the existing literature, despite the wide scale of research on medical travel.

Aim: We explore the perspectives of women who are seeking better services outside their place of residence and midwives who travel to provide them.

Method:

We conducted qualitative interviews with 13 women from various European countries, four travelling midwives and one activist. We did thematic analysis and framed our questions with three concepts: the midwifery model of care, the technocratic model of care and trust.

Findings:

We identified five key themes: 1) natural birth and better care, 2) search for information, 3) trust and trauma, 4) fulfilling expectations and 5) negotiation. Decision to travel is the result of a long-term process, influenced by various push and pull factors. Women and midwives share values; they trust women's capacity to give birth, value respect, communicate as equals, develop a trusting relationship and create a friendly environment without unnecessary treatments. Trust and distrust on interpersonal and institutional levels influence women's decisions and frame narratives about their experiences.

Conclusion:

To a great extent, travelling women and midwives share the values embedded in the midwifery model of care. Women and midwives were willing to take matters into their own hands. They have agency and possibilities to achieve desired birth experiences.

O-5.3.2

Birth Satisfaction Scale Revised (BSS-R) Explored: A large scale United States Planned Home Birth and Birth Centre/Center Survey

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Background:

During the past two decades, an increase (1% to 1.5%) of out-of-hospital births (e.g., Homes, Birth Centres) in the United States (U.S.) has been observed. Most of those births occurred in the home. In the pacific north west of the U.S out-of-hospital births represent 3-6% of all births. Extant research supports the safety and cost effectiveness of this emergent phenomenon. Quantifying women's birth satisfaction experience using a valid and reliable tool is limited and has been primarily focused on hospital births. Birth satisfaction correlates with the childbearing women's quality of care, personal attributes and stress experienced during labour/labor. High quality maternal birth care

cannot be realized unless the childbearing woman is satisfied. The meaning of birth satisfaction is diverse and may take on many forms.

Method:

A quantitative survey using the BSS-R (10 – items) was employed using electronic linkages (Qualtrics™). A convenience sample of childbearing women (n=2229) who had planned to birth in their home or birth center from United States volunteered and reported on their most recent birth. Participants were recruited via professional and personal contacts, primarily their midwives.

Findings:

Women's quality of care provision, personal attributes, and stress experienced during labour was quantified and overall experienced high levels of birth satisfaction. Satisfaction was higher for women with vaginal births compared with caesareans deliveries. In addition, satisfaction was higher for women who had both planned to deliver in a home or a birth center, and who had actually delivered in a home or a birth center. Finally, there were no differences in satisfaction between birth centres and home births.

Conclusion:

Total and subscale birth satisfaction scores were positive and high for the overall sample. The BSS-R provides a robust tool to quantify women's experiences of childbirth between variables such as birth types, birth settings and providers.

O-5.3.3

Giving Voice to Mothers - US: Women speak of autonomy, respect, and outcomes of care by place of birth

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Background:

The Giving Voice to Mothers-US study examined access to and experience of maternity care across birth settings in the United States. A multi-stakeholder, national Steering Council, including service users, clinicians, and community groups convened to design a cross-sectional national survey.

Method:

They selected topics, reviewed validated measures, and designed new items, including several novel domains such as experiences of autonomy, respect and mistreatment by providers. Recruitment was targeted to women who were pregnant between 2010-2016, who self-identified as a visible minority and/or who planned a community birth.

Findings:

Of the 3266 women who started the survey, 2700 women met eligibility criteria, and 34% self-identified as a woman of colour. About half planned a community birth (home or freestanding birth center) and half planned to deliver at a birthing center inside a hospital, or at a hospital. Over 90% reported that choice of birth place was important/very important to them.

The most common reasons why women planned a community birth were: "control over my childbirth experience", "a comfortable, peaceful environment", "low intervention options for care", "to avoid disturbance of my labour", "to avoid having to fight for the birth I want", "to avoid a cesarean section", "to avoid separation from my baby", "to avoid hospital policies and procedure", and "to avoid time limits". Over 82% of those who planned a community birth felt judged or criticized for their choice of birth place by the public (37.5 %), healthcare providers/hospital staff (32.5%), their friends (32.1 %), their in-laws (31.5 %), their parents (29.4 %) or work colleagues (28.9%).

Conclusion:

Women who gave birth in the community reported significantly more autonomy in decision making and more respectful care, compared to women who gave birth at the hospital. However, women who transferred from community to hospital had the highest rates of mistreatment and disrespectful care.

O-5.3.4

'You feel at home - you feel safe'. A phenomenological study of the birth environments impact on fathers' experience of the birth of their first child

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Background:

The birth of a child is in many ways the most life subverting event in people's lives. Within midwifery care there has been an emphasis on safety issues and relational aspects of pregnancy and childbirth (particularly with focus on the mother and child), but less focus on the design of the birth environment and its impact on the course of the event for the couple.

In hospitals in resource-rich countries birth environments remain primarily as rooms accommodating the birth as a medical event and have less focus on the atmosphere in the environment.

Method:

A phenomenological study with 12 first time fathers. It is a comparative study including fathers who experienced the birth of their first child in traditional delivery rooms and in the newly designed delivery room in the project: 'birth environment of the future' at Herning Hospital, Denmark. The methods used are qualitative in-depth interviews and re-enactment

Findings:

The analysis showed that atmosphere in the birth environment plays a role on how fathers are navigating their role during delivery. The fathers who had their birth in the newly designed room seemed to navigate better, because their habitual practices were better supported. Being close to habitual practice these fathers were more reflective and able to talk about their experience and they felt a more profound sense of ownership of the event than the fathers in the traditional delivery rooms.

Conclusion:

With the changing nature of fatherhood and fathering, and an increasing focus on father involvement and of the conditions that support the active involvement of fathers with their children, this study concludes that the newly designed birth environment with focus on immersing moods and homely atmosphere in the birth environment has a significant impact on how men make the transitions into fathering.

5.4-Challenges in midwifery care

O-5.4.1

Risk factors for stillbirth and beliefs: findings from a pilot near miss questionnaire study in Somaliland focusing the mother-baby dyad

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Background:

Somalia is one of 13 countries in Africa with stillbirth rates of more than 30 per 1000 total birth. To our knowledge, no study in Somaliland has focused on the mother-baby dyad regarding risk factors for stillbirth. The objective of this study was to identify frequency, causes and beliefs for stillbirth in mothers with life threatening conditions as a pilot for potential nationwide near-miss study with full coverage in the Somaliland health care system.

Method:

A prospective cross sectional study using the WHO near-miss questionnaire in a tertiary level hospital with 1.385 deliveries during a five months period in 2015.

Findings:

Out of 138 near miss and death events 22 percent (n=30) had a stillbirth. Seventy-seven percent (77%) of the mothers (n=23) with stillborn babies survived and 23% died (n=7). They were diagnosed with life threatening conditions possible to prevent, on arrival at the tertiary hospital. None of them developed the maternal complication or complications during the hospital stay. Cesarean sections (43%) were performed within three hours after arrival. Beliefs regarding the stillbirth for the near miss women were that holding the stillborn baby helps them cope with the loss (74%) and that religious believes helps them cope faster with the loss (91%)

Conclusion:

The near miss women, their families, TBAs and SBAs might need better information of what causes a stillbirth and how they could prevent it and about the near miss women's beliefs surrounding stillbirth to enable them to communicate this to pregnant women and prevent delay in admission to the tertiary hospital. Furthermore, this pilot study suggest that the "Near Miss Questionnaire" could be used in low- and middle income settings to detect a full picture of the situation with stillbirth in a country.

O-5.4.2

The situation for internally displaced children aged 6 to 59 months in Somalia -A questionnaire survey among caregivers in internally displaced peoples' communities

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Background:

With drought concurrent with conflict that has collapsed the health system, coping mechanisms and communal resilience have eroded for internally displaced children and their families in Somalia. With this background, the aim of this survey was to explore the situation for internally displaced children 6-59 months included in a nutrition program provided by the NGO Save the Children during 2017-2018.

Method:

The caregivers' knowledge, perceptions and practice on breastfeeding and weaning, the situation in the household in terms of hunger and hygiene and the children's nutrition status were explored. Data was collected through a questionnaire, observations and anthropometry. Data were sent to an online server on a daily basis using a smartphone.

Findings:

The results analysed, using descriptive statistics, revealed a situation with severe or critical malnutrition in internally displaced children in South Central Somalia in August 2017. The main result of this study was the disclosure of the prevalence of serious and critical malnutrition, up to 26 to 39% among children aged 6 to 59 months in internally displaced peoples' communities in August 2017. Caregivers were in need of perinatal education as the caregivers got a knowledge score regarding breastfeeding, weaning and hygiene that was under the score of what was considered knowledgeable and hygienic.

Conclusion:

Early initiation of breastfeeding after birth and exclusive breastfeeding for 6 months continued to 24 months coupled with complementary feeding practice under care and advice from health professionals at Maternal and Child Health (MCH) clinics and perinatal education may improve the situation. An enabling environment with safe water and food supplies and sanitation modalities is needed in the Internally Displaced Persons (IDP) communities. These recommendations could be transferred to similar settings.

O-5.4.3

Midwives' and Public Health Nurses' Experiences of Encountering Newly Arrived Asylum Seekers in Finland during the European Migrant Crisis 2015-16

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Background:

Finnish health care faced a new challenge in 2015, when the 33 495 new asylum seekers nearly ten-folded humanitarian migration to Finland in one year of time. Of these people, 60% were of reproductive age, and of the 6314 female asylum seekers many had their first contact to the Finnish health care in antenatal clinics or birthing hospitals. This study examined how maternity care professionals working in these units experienced encounters with the newly arrived asylum seeker women.

Method:

Eighteen semi-structured interviews were conducted among public health nurses and midwives working at maternity clinics and referral-level obstetric care in Finland. Interviews were audio-recorded, transcribed and analysed through qualitative content analysis.

Findings:

All participants recalled the years 2015-16 as a time of rapid change in their client groups' nationalities. Different bureaucracy, asylum seekers' specific health needs, and language issues arose repeatedly in the narratives, and added up as challenges to participants' routine work. Refugee workers, asylum centre volunteers, and interpreters were nominated as new essential stakeholders in the caring process, and interpersonal and interprofessional co-operation was highlighted in the narratives.

Conclusion:

Maternity care professionals' role for pregnant immigrant women's health in their new country was described in this study, and discussed in the light of earlier studies performed in other similar contexts. As earlier literature reports migrant women carrying heavier burden in maternal morbidity, it is important to recognise facilitators for positive encounters between asylum seeker women and maternity care professionals. This potentially can enhance better maternal health in otherwise more vulnerable group of women. Considering the ongoing transitions in maternity care user groups in Nordic countries, more research on the subject is recommended.

O-5.4.4

The Views of Somali Religious Leaders on Birth Spacing - a Qualitative Study

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Background:

Culture and religion are reported to be barriers in the utilization of contraceptives by women living in Sub-Saharan Africa. In Somalia, religious leaders are important leaders of opinion in communities; therefore, it is of interest to gain a deeper understanding of their views on birth spacing that have been transferred by way of counseling and speeches to boys and men in the Quran School and in the mosque, as well as counseling for couples seeking advice on birth spacing.

Method:

A qualitative interview study with 17 religious leaders was conducted. The interviews were analysed using content analysis.

Findings:

The main category that emerged from the analysis was: *Birth spacing according to Islam*. The findings showed that the religious leaders viewed birth spacing in two ways: *accepted ways* and *prohibited ways of birth spacing*. The accepted ways of birth spacing were considered to be as follows: breastfeeding, contraceptive pills if not harmful to the mother's health, the withdrawal method (coitus interruptus), shared decision-making by the couple on how to deal with birth spacing, and Muslim doctors as decision-makers in certain circumstances in terms of strong suggestions to the couple to follow the doctor's advice. The prohibited ways of birth spacing according to religious leaders were when the intention was to limit the number of children, which they considered to be against Islam, and condom use, which might lead to negative use.

Conclusion:

Religious leaders have a vital role in society as they provide counseling; there is a need to increase their knowledge on women's sexual and reproductive health.

Oral Session 6

6.1-Interventions and organization of care II

O-6.1.1

The Lifelines NEXT birth cohort

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Background:

Epidemiological research has repeatedly shown that there is a strong relationship between influences on early life development and lifelong health. A prospective birth cohort gives us the opportunity to study the effects of intrinsic and external determinants on lifelong health and disease.

Method:

Lifelines NEXT is a birth cohort nested within Lifelines. Lifelines is a multi-disciplinary prospective population-based multigenerational cohort study examining the health and health-related behaviours of 167,729 persons living in North Netherlands.

Lifelines NEXT aims to intensively follow 1500 pregnant Lifelines members and their children, starting at 12 weeks gestational age until at least the age of one year. Long-term follow-up on physical and psychological health will be embedded in Lifelines. Since the start in October 2016, 306 pregnant women have been included and 212 babies have been born. Inclusion is ongoing. During the study period biomaterials are collected including maternal and neonatal (cord) blood, placenta tissue, feces and breastmilk at multiple time points. Data on environmental, social, medical and birth factors, including pregnancy interventions, childbirth experience and maternal mental health, are collected via questionnaires at 14 time points. After the data collection is completed, the data will be available for (inter)national collaboration.

Findings:

With the data from Lifelines NEXT we have an unique opportunity to relate integrated information on immunology, microbiome, metabolism, genetics, epigenetics and environmental influences, to short- and long term health outcomes of women and children. In the field of midwifery this includes studying medical interventions during labour and birth, like the use of exogenous oxytocin during labour, in relation to health outcomes of mother and child.

Conclusion:

Implications of findings in Lifelines NEXT are wide. They can for instance be used to inform women about possible effects of labour interventions. This will facilitate shared decision making regarding management of labour and birth.

O-6.1.2

Birth Statistics 2018 - births in Denmark 1998-2016 from the MIPAC-database

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Background:

Maternity care is characterized by more interventions and fewer uncomplicated deliveries, and everyday-clinicians should be able to follow changes in practice and in intervention- and complication-rates. The Danish Health Authorities' wishes to make health related data more accessible to policy makers, health professionals, and the public in general. Initiatives like a Visibility Reform and the establishment of a Health Data Board (which hosts an eHealth service, where any citizen can look up hospital and health related information on aggregated levels), have been carried out. Despite easier access to register data, the eHealth service has some drawbacks. It takes certain technical skills to utilize the service optimally, and users can only access a set of pre-selected variables. We developed a database on childbirths in Denmark (MIPAC – Medicalisation in Pregnancy and Childbirth) in order to make updated and relevant information on reproductive health in Denmark easily available to users.

Method:

In 2016, the Midwifery Program in Copenhagen established the MIPAC-database in Statistics Denmark. MIPAC includes all births in Denmark from 1998 and onwards and consists of data merged from several national registers on health and socio-economic factors.

Findings:

Data from the first MIPAC-report (expected release date January 2019) will be presented and structured according to (1) organization of maternity care, (2) characteristics of the population, (3) interventions, and (4) birth outcomes. A thorough data cleaning process has shown that some central variables in the Medical Birth Register are utmost complex or malfunctioning. These experiences will also be touched upon.

Conclusion:

We will present conclusions from the report, share experiences from working with Danish Medical Birth Register data, including concerns about the quality of core variables (e.g. cesarean section and perinatal death), and discuss how we can ensure that future Birth Statistics from MIPAC will appear relevant to colleagues in clinical practice.

O-6.1.3

The Robson ten-group classification in Iceland: Obstetric interventions and outcomes

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Background:

Different groups of (delivering) women may contribute to the caesarean section rates in countries with high and low rates. However, there is scarcity of information particularly for developed countries with low rates. This study investigated the caesarean section rates and contributing groups in Iceland using the Robson ten-group classification.

Method:

This study included all births in Iceland during 1997-2015, identified from the Icelandic Medical Birth Registry (81,839). The Robson distribution, caesarean section rate, and contribution of each Robson group were analysed for each year and the distribution of obstetric interventions and perinatal and maternal outcomes calculated for each Robson group.

Findings:

The overall caesarean rate in the population was 16.4%. Robson groups 1 (28.6%) and 3 (37.8%) were the largest groups and groups 2b (0.3%) and 4b (0.7%) were small. Compared to other studies, the caesarean section rate in group 5 was relatively low (55.5%). However, group 5 is the largest contributing group to the overall caesarean section rate (5.1%), followed by groups 1 (2.8%) and 2a (1.8%). Groups 2a (RR=1.04, 95% CI=1.01-1.08) and 4a (RR=1.04, 95% CI=1.01-1.07) increased significantly in size on average each year during the study period while the caesarean section rate in the groups was stable (group 2a: $p=0.08$) or decreased (group 4a: RR=0.95, 95% CI=0.91-0.98). The intrapartum caesarean section rate was more than twice as common in group 2a (25.8%) than in group 1 (9.8%).

Conclusion:

The results indicated that the rate of pre-labour caesarean sections in Iceland is low and the rate of caesarean section in women with a previous caesarean section is low compared to other countries. Even though the rate of labour induction increased significantly during the study period, the rate of caesarean sections in women with spontaneous labour or induction of labour has not increased.

O-6.1.4

An exploration of women's experiences of their birth choices in pregnancy following a previous caesarean section (CS): a grounded theory study.

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Background:

Reports identify a lack of choice for pregnant women including women's choice of vaginal birth after a previous caesarean section (VBAC) (HIQA, 2016; DOH, 2016). VBAC is a safe choice for the majority of women, however women's choice has to be facilitated (RCOG, 2015; HSE, 2011). Women's experience of decision making about VBAC has been described as 'groping through the fog', where decision making and information during pregnancy and the birth is unclear and contrasting (Lundgren et al, 2012). To date, no theory has explored women's experiences of decision making with birth choices in pregnancy following a previous CS.

Method:

Classic grounded theory based on Glaser and Strauss (1967). Pregnant women recruited through antenatal clinics, 15 women interviewed who had experienced a previous CS (Elective or emergency). Ethical approval obtained.

Findings:

The substantive theory of mentalizing possibilities explains a woman's coping ability when faced with decisional-conflict, uncertainty, ambiguity, confusion and threat. Women's main concern is to redefine their birth experience positively. Women's perception about self-control determines how women mentalize possibilities and accordingly women's behaviour can be classified into four different types. Women mentalize possibilities by possibility seeking, probability distancing and reality re-seeking. These three sub-core categories explain how women develop awareness, knowledge and trust that helps them in adhering or non-adhering to a birth choice in pregnancy following a previous CS.

Conclusion:

Women want a positive birth experience in pregnancy after a previous CS. These women require support and continuity in decision making in order to help them decide the optimal birth choice for their current pregnancy. To provide a positive birth experience for individual women, healthcare professionals should engage with women in pregnancy and listen to their concerns.

6.2-Antenatal care for immigrant women

O-6.2.1

The MAMA ACT feasibility study - Lessons learned from midwives in Danish antenatal care

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Background:

Recently, the influx of non-western migrants to Denmark has increased significantly. Communication barriers, lack of or delayed response to pregnancy complications among maternity care providers and migrant women, have shown to lead to suboptimal care and add to the probability of maternal and perinatal death.

Little is known about how to improve these inequities in reproductive health. The MAMA ACT intervention, which included a training course for midwives, a folder and app plus additional visit time, aimed to increase response to pregnancy symptoms among midwives and non-Western migrant women.

The objective of this study was to a) explore the feasibility and acceptability of the MAMA ACT intervention among midwives, b) examine midwives' compliance with the intervention and c) identify factors affecting midwives' delivery of the intervention.

Method:

DataEight mini-group interviews with midwives (n=18) at two antenatal care centers were carried out.

AnalysisData were analyzed using systematic text condensation.

Findings:

Three main categories, each with two sub-categories, were identified. Main categories were 'Attitudes towards and use of the leaflet and app', 'Challenges of working with Non-Western migrant women', and 'Organizational factors affecting the use of the MAMA ACT intervention'.

Conclusion:

The MAMA ACT intervention was found to be feasible and acceptable among midwives. Midwives' compliance with the intervention was high during the first visit, but low at the subsequent visits. The expression of diffuse body symptoms by non-Western migrant women affected midwives' perceptions of them. The training course contributed to midwives' reflections about their care provision. Factors such as time constraints, lack of professional interpreter assistance, women arriving late for their midwifery visits and turning to relatives for pregnancy-related advice, impacted midwives' delivery of the intervention.

The feasibility study has led to several modifications of the intervention prior to a national realist trial. This trial is currently ongoing.

O-6.2.2

'Pregnant without a residence permit - the experience of pregnancy and use of health services among undocumented migrants in Denmark'

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Background:

Between 20.000 and 50.000 undocumented migrants are estimated to live in Denmark. They are in a very vulnerable position, as they reside in Denmark without the knowledge or accept of the authorities. Thereby they have limited legal rights, including limited access to healthcare, and they live under a threat of deportation. Very little is known about how these factors may affect their health and healthcare seeking behavior during pregnancy. This study aim at gaining knowledge about how the women experience their pregnancy, the access to healthcare and what sources they use to maintain the health of themselves and their babies.

Method:

All informants was pregnant women attending antenatal care at a health clinic for undocumented migrants in Copenhagen run by the Red Cross. Fifteen semistructured interviews was performed, involving questions about

well-being during pregnancy, healthcare seeking behavior and thoughts about maintaining the health of both themselves and their child. Systematic text condensation was used for analysis.

Findings:

Preliminary results show that expecting undocumented migrants are highly dependent on informal healthcare, and that they experience fear and uncertainty in their pregnancy related to their precarious legal situation.

Conclusion:

Conclusions will be presented at the conference, including a discussion regarding the role of midwives meeting undocumented migrants in clinical practice

O-6.2.3

Development of an application for interactive communication in antenatal care with Arabic speaking women.

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Background:

In Sweden, there are unequal conditions for healthcare between immigrant pregnant women and native pregnant women. One of the reasons is the cultural and linguistic differences, which could lead to greater risks for the mother and the expectant child. In this project, an application will be developed to facilitate communication in antenatal care. A co-design methodology will be used which means collaboration between users and researchers in five different phases: users' needs and preferences, development, field testing I, refinement and field testing II. A first version of the application has been developed, and field testing phase I is ongoing. The aim was to examine Arabic-speaking women and midwives' experiences of communication in antenatal healthcare using an application.

Method:

Data collection was obtained with repeated focus group interviews with four midwives and individual interviews with four Arabic speaking women. The data analysis was based on a content analysis.

Findings:

The midwives felt confident that the information given to the Arabic speaking women was correct. A disadvantage in using the application was difficulties in combining the application, interpreter and journaling, so the conversation flowed naturally.

Arabic speaking women experienced the information as instructive, and the language was clear and understandable. A disadvantage was that they could not ask questions to clarify some unclear issues, if there was no interpreter available during the visit.

Conclusion:

Information and Communication Technology (ICT)-based support services can be a potentially promising way to provide support in antenatal care.

It can improve and ensure the quality of information for Arabic speaking women and enable midwives to make sure that women receive correct information.

O-6.2.4

Non-Swedish speaking women's experiences of an individual customized visit to the labor ward during pregnancy

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Background:

In Sweden, about 28% of all women giving birth are migrants. It is well-known that women who are non-native speakers and who are unfamiliar with the healthcare system in the country they live in have an increased risk for adverse pregnancy outcomes. Despite the known inequities in Swedish health care, few measures have been undertaken to meet migrant women's needs in relation to maternal health care. The municipality of Södertälje in Sweden has welcomed more migrants than other municipalities in Sweden. To to familiarize non-Swedish speaking pregnant women with their care for labour and birth, and the postpartum hospital stay, Södertälje hospital have

therefore implemented an individual customized visit to the labor ward for this group of women. The aim of this study was to explore the women's experiences of this visit.

Method:

A qualitative design using semi-structured interviews was used. Ten women were recruited two to six months postpartum. Thematic analysis was conducted to interpret the women's experiences and describe patterns within the data.

Findings:

The analysis is ongoing and results will be presented at the NJF Congress.

Conclusion:

The analysis is ongoing and results will be presented at the NJF Congress.

6.3-Place of birth and fetal wellbeing

O-6.3.1

Giving Birth in rural arctic East Greenland

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Background:

There is limited evidence regarding birth outcomes in rural arctic areas. The few published reports are from Alaska and Northern Canada. The focus is on the higher infant morbidity and mortality and the challenging circumstances with transportation of women from the rural areas to distant obstetric units to give birth.

Birth practice may be challenging in rural areas due to demographic, organisational and geographic structures as well as lack of health care providers. East Greenland is one of the most remote areas in the world and with a very harsh climate. The population of 4500 are living in two small towns and five villages. There is a small hospital in Tasiilaq, where almost all the births take place and where it is possible to perform a caesarean section. There is a long tradition for midwifery care and close collaboration between health professionals. In recent years a tendency to centralize births in Greenland has occurred. Women living in East Greenland prefer to stay in there to give birth, instead of being moved to a distant obstetric unit. The provision of women-centred care has implied a low transfer rate to the obstetric unit in Nuuk and a strong health promotive approach. No previous detailed information on birth outcomes has been collected from East Greenland.

Method:

This study presents descriptive information on both historical and present data, covering the period from 2003-2017, on women's characteristics, births and neonatal outcomes.

Findings:

Results are pending and will be presented at the conference.

Conclusion:

The conclusion is pending and will be presented at the conference.

O-6.3.2

Intermittent auscultation (IA) as fetal monitoring during labour: a systematic scoping review to identify methods of IA, effects and accuracy

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Background:

Intermittent auscultation (IA) is the recommended method for fetal heart surveillance during labour in low-risk. In the Western world, the knowledge and skills in performing IA – especially by using the Pinard – is rapidly disappearing from midwifery practice because of the preferential application of the cardiotocograph (CTG) machine. As IA monitoring leads to fewer unnecessary interventions and is a safe option for healthy women and their babies during labour, it is recommended in these cases. At the same time, there is no evidence and little guidance for the best way of performing IA in terms of frequency, timing and duration.

Our purpose is to present the findings of a systematic scoping review of studies that 1): systematically mapped different techniques and protocols for performing IA as described in studies evaluating IA; and mapped any effects or accuracy where these had been measured; and 2): map recommendations in international and national guidelines

Method:

A systematic scoping review. The first literature searches were done in ten databases, 3128 records were screened and 261 papers were taken into full-text review. Citation searches for included papers resulted in 12 hits, all screened and four assessed in full text.

Findings:

A total of 24 studies and 11 guidelines were included in the review. We will present different techniques and protocols of performing IA, including how normal and abnormal auscultations were defined. We have performed a new meta-analysis comparing the effects of auscultation with Pinard vs. hand-held Doppler. Four randomised controlled trials including 8436 women and their babies were included in the meta-analysis. Results from studies assessing the accuracy of FHR auscultations during labour will be presented. Finally, the quality of, and IA recommendations from, three international and eight national guidelines will be presented and discussed.

Conclusion:

Implication for practice and for future research will be presented.

O-6.3.3

National survey of routines for intrapartum fetal monitoring in Norway

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Background:

The aim of fetal monitoring during labor is to identify fetuses at risk of developing intrapartum hypoxia to intervene to prevent fetal, neonatal, and long-term injuries. However, it is also important not to increase obstetric interventions. This study describes clinical routines for intrapartum fetal monitoring in Norway and compliance with national clinical recommendations.

Method:

A national survey of all (n = 48) birth units in Norway, using a self-reporting questionnaire about routines for fetal monitoring methods and devices available in the birth units, admission cardiotocography (CTG) use, intrapartum fetal monitoring methods for women with and without risk factors, the availability of fetal scalp blood sampling facilities, and umbilical cord blood sampling routines.

Findings:

All birth units responded. They all had access to Pinard stethoscopes, hand-held Doppler devices, and CTG. Half of the units used ST waveform analysis as an adjunct to CTG. Furthermore, 23/48 units analyzed fetal blood samples and 43/48 umbilical cord blood gas samples. We will present results on routines for use of the different devices as well as to what extent national clinical recommendations have been followed.

Conclusion:

Our findings indicate some deviations from clinical recommendations in the use of intrapartum fetal monitoring in Norway. We will present an overview of the discrepancy between the routines for fetal monitoring and national clinical recommendations.

O-6.3.4

Women ask for professional breastfeeding support in harmony with the family's needs

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Background:

WHO recommends exclusively breastfeeding, but women often stop breastfeeding earlier than they would like to. Support from healthcare professionals are crucial for breastfeeding women. The aim of this study was to explore women's advice to healthcare professionals regarding breastfeeding support.

Method:

A descriptive qualitative interview study based on a purposive sample of women recruited through social media platforms in Sweden. The study participants were asked, *"Do you have any advice you would like to give to healthcare professionals regarding breastfeeding support?"*. Qualitative content analysis were used.

Findings:

In total, 139 women gave their advice to healthcare professionals. The theme "Professionals need to offer women sensitive individualized breastfeeding support" was explored. Professionals were advised to increase their knowledge and skills about breastfeeding, and to provide evidence based breastfeeding support. The women wanted that the partner should be involved during pregnancy, so they not feel left out from the family relationship during breastfeeding. Healthcare professionals were advised to prepare expectant parents with realistic breastfeeding information to help them to make informed individual decisions. Healthcare professionals should listen to women's wishes and share information in a respectful and trustful dialogue.

Conclusion:

The results highlight that women preferred evidence-based breastfeeding support in harmony with the family's needs to help them reaching their breastfeeding goals.

6.4-Interprofessional cooperation

O-6.4.1

Veiled midwifery in the baby factory - Midwives marching to own drum - Other professions perspective of midwifery work in labour wards.

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Background:

There has been a paradigm shift in midwifery over time where different professions now work together in childbirth care. This demands a greater effort of interprofessional collaboration. There is little research on midwives' work from other professionals' perspectives, which is of importance to improve midwives work situation and women-centred care. Therefore, the aim of this article was to explore other professions' views of midwifery work during childbirth.

Method:

Classical Grounded Theory, using a constant comparative analysis, was applied to focus group interviews with obstetricians, assistant nurses and managers.

Findings:

The substantive theory of 'veiled midwifery' emerged as an explanation of the social process between the professions in the 'baby factory' context. The other professionals perceive midwifery through a veil that filters the reality and only permits fragmentary images of the midwives' work. The main concern for the other professions was that the midwives were 'marching to own drum'. The midwives were perceived as both in dissonance with the baby factory, and therefore hard to control, or, alternatively more compliant with the prevailing rhythm. This caused an unpredictability, which in turn resulted in attempts to cooperate and gain access to the midwifery world, by using three unveiling strategies: Scrutinising, Streamlining and Collaborating admittance.

Conclusion:

Findings provide a theoretical conceptualisation of a 'veiled midwifery' that causes problems for the surrounding team. This generates a desire to streamline and control midwifery in order to increase interprofessional collaboration.

The theory of veiled midwifery could be used as a theoretical basis for future studies, and could be a foundation for a dialogue of philosophical differences in the way birth is viewed in the clinical setting, to improve the work situation.

O-6.4.2

MMAY childbirth - Measurement of Midwifery quAlitY from women's point of view - Development of an instrument

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Background:

Evaluating the quality of midwifery care is important for quality assurance and to guide midwives' professional development. Quality "is the entirety of characteristic properties of an entity relating its suitability to fulfil defined and predetermined criteria" (ISO 9001:2000). Very few instruments are available to measure midwifery care quality, and all lack valid criteria/objectives. An instrument to assess the quality of midwifery care with predefined objectives from women's point of view was therefore developed.

Method:

(1) Systematic review of quality measurements in midwifery care; (2) development of a target hierarchy, including theoretical and empirical systematic literature analysis; (3) literature-based item development; (4) testing of psychometric properties in a first cohort of 133 women who have recently given birth, by means of exploratory factor analysis (EFA) and reliability analysis; (5) the final version will be further explored by confirmatory factor analysis (CFA) in another sample of ca. 1000 women in 2018. The research protocol was approved by the ethics committee of The Hochschule für Gesundheit, University of Applied Sciences. This project is part of the study *Midwifery care in North Rhine-Westphalia*. Funded by *Landeszentrum Gesundheit Nordrhein-Westfalen* (LZG TG 72001/2016).

Findings:

EFA suggested a 23-item scale with 3 components (Cronbach's alpha $\alpha=.95$): Personal Control ($\alpha=.82$), Orientation & Security ($\alpha=.91$) and Trustful Relationship ($\alpha=.91$). Empirical Findings of EFA predominantly showed the same objective groups as pre-defined. The results of the CFA and correlations with other questions on midwifery care will be presented.

Conclusion:

A valid instrument for the evaluation of midwifery care from women's point of view has been lacking for use in research and evaluation of midwifery care. The instrument developed as described above appears to be a valid tool for these purposes.

O-6.4.3

Midwives' Perceptions on Interprofessional Cooperation in Early Life Family Care: A Qualitative Study

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Background:

Around 13% of families with newborns in Germany are in need of the assistance of the early prevention networks. The "German Federal Foundation Early Prevention" pursues the aim of improving the development opportunities of parents and their children, especially those in stressful situations. A central goal is to strengthen the cross-system cooperation between the professionals working in healthcare and social welfare. Freelance midwives are to be involved in the interprofessional networks of early prevention, but there has been hardly any research on their view on this cooperation.

The proposed presentation does focus on the influences which, from a midwifery perspective, do shape the emergence and development of cooperation between the actors of social welfare and midwives in the field of early life family care.

Method:

The qualitative study completed is based on 27 problem-centered interviews with freelance midwives in 13 federal states of Germany. Data evaluation was performed using qualitative text analysis (Kuckartz, 2016). Ethical approval was obtained.

Findings:

Jointly offered services, clear responsibilities and being open-minded to the way of working with the other professions all contribute to a successful cooperation from a midwives' perspective. An absence of midwives' knowledge of structures in early prevention, differences in the socialisation of professional groups in the health and social care sector, as well as previous experiences can influence cooperation in the development process. Further, the cooperation-related proximity to child and youth welfare in some cases has a negative effect on the trusted relationship between midwives and their clients.

Conclusion:

Cooperation is shaped by the interactions between the professional groups involved, by health policy conditions and by the working relationships of midwives with the women and families being cared for. Understanding the cooperation between midwives and professionals of social services is vital to improve the care of women and families with special needs for support.

O-6.4.4

Labour ward leaders; working together for safer care

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Background:

A survey of labour ward midwives and obstetricians identified that midwives and doctors faced daily challenges in keeping women and babies safe on the labour ward. A lack of suitable training for the role, an increase in child birth complexity and a misunderstanding of each other's roles added to the intricacies of the birth environment.

Method:

Following the survey, midwife educators worked alongside obstetricians and safety experts to design a one day interactive leaders workshop. The workshop was tested out on four pilot sites across England with each workshop having a multidisciplinary (MDT) labour ward team of 6-8 attendees. Each team was required to fill in a pre-workshop questionnaire on their perception of the efficacy of the labour ward team, pre-event reading on safety in the labour room and to work with the wider MDT on a quality improvement (QI) initiative. A template for the QI initiative was provided and guidance given on developing a project which is manageable.

Findings:

The workshops were extremely well received and evaluated with averages scores of 8+/10. Delegates felt that the opportunity for a MDT to spend time away together from the clinical environment provided a safe space to discuss current challenges and to develop a better understanding of each other's roles and how best to work together to improve safety and outcomes for women and families.

Conclusion:

The pilot programmes were very well received and the workshop was rolled out across the UK. To date 20 workshops have been run, with each team working collaboratively on a QI initiative.

One team stated

"We have completely changed the culture of our MDT labour ward handovers it's still developing but I am really pleased with what has been achieved. It wouldn't have happened without this LW leaders day getting us together."
AB Sheffield

Oral Session 7

7.1-Midwifery models of care II

O-7.1.1

Björkin birthcenter, more options for women in childbirth

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Background:

Björkin Ljósmaður (Björkin Midwives) is a company founded in 2009. It is owned and operated by two midwives, Arney Þórarinsdóttir and Hrafnhildur Halldórsdóttir. Björkin midwives attend homebirths in Reykjavík and surrounding area. In May 2017 they expanded their services and opened a birth center in Reykjavík so more families

can experience birth out of hospital and in a homelike environment with a midwife they know and trust. The clinic is located at Síðumúli 10 in Reykjavík, where Björkin is now located. Björkin also provides maternity care, postpartum care, counseling, birth preparation classes and acupuncture, amongst other things. Women and their families receive maternity care in the last few weeks of pregnancy (approximately from week 34), and care during birth and the first week after birth.

Method:

developing new form of care

Findings:

more women are giving birth out of hospital in Iceland

Conclusion:

Today, there are much fewer birthplaces in Iceland than there were a decade ago. Women have had to travel increasingly longer distances to give birth. Birthing services in Reykjavík have also become more limited, with only one big delivery ward in Landspítali, the country's biggest hospital. Women living in places where there is no hospital/birthplace, and no midwife to offer continuous care, are not offered the same opportunities as their fellow women who choose to give birth at home in Reykjavík. With this new birth clinic, more women have the opportunity of receiving continuous care, with the same midwife providing care in late pregnancy, during childbirth and postpartum. Recent studies indicate that it's very important for women to (be able to) choose the place of birth, because it is linked to better outcomes during birth.

O-7.1.2

Call the midwife- implementing a continuity model of midwifery care during pregnancy, labour and birth

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Background:

There is a call for new models for maternity care in Sweden, due to problems with over-crowded labour wards and midwives leaving the profession. Case load is an evidence-based model of care with high continuity from pregnancy to birth. We lack knowledge about the possibilities to implement such model of care in Sweden, in rural areas with long distance to hospital. The purpose of the project is to develop, implement and evaluate a new working model that takes advantage of the staff's competence and guarantee a safe health care for expectant parents during pregnancy, birth and the postnatal period.

Method:

Pregnant women and their partners will have a primary midwife during the antenatal visits and the midwife or a co-midwife, whom the parents have previously met, will follow them to hospital and assist at the birth of the baby. The context of care is in a rural area with long distance to hospital (100-120 km). The project will have a special focus on women with fear of childbirth, young women and first time parents. Pregnant women and their partners will be followed using a longitudinal cohort study. Data for the study will be collected by questionnaires, medical records and interviews with parents. The project midwives will be followed with interviews to assess their experience of working in a new model of care. The working model will gradually be adapted to project midwives and parents' wishes

Findings:

During the first year with midwives being 'on-call', 178 women and their partners were recruited to the project. A known midwife was present at 49% of the births. Birth outcome and women's satisfaction will be presented

Conclusion:

To be written

O-7.1.3

Improving maternal and neonatal health by a midwife-led continuity model of care - an observational intervention study in Palestine.

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Background:

A Midwife-led continuity model of care has been implemented in several governmental maternal facilities in Palestine. The model implies that midwives from public hospitals provide outreaching caseload ante- and postnatal care to women in rural villages clinics and homes. This study investigated if the model had impact on important maternal and neonatal health outcomes.

Method:

A register based, retrospective cohort design was used, involving 2 201 singleton births between January 2016 and June 2017 at Nablus governmental hospital. Data from women who received the midwife-led model was compared with data from women who received regular care. Primary outcome was unplanned caesarean section. Secondary outcomes were postpartum anemia, blood transfusion, induction of labour, premature delivery, birth weight and admission to neonatal intensive care unit.

Findings:

The findings are included in an article that is in the process of peer review and not yet published. To avoid any prepublications of results we will send you the results after the article is published, expected in due time to be presented at the conference.

Conclusion:

Receiving care from the Midwife-led continuity model of care in Palestine seemed to be associated with improved important maternal and neonatal health outcomes. The result implies that the model should be further expanded in Palestine, and tested by a randomized trial to investigate the model's causal impact. Experiences from implementing this midwife-led continuity model of care in Palestine could be useful to improve mothers and babies' health globally.

O-7.1.4

Enhancing midwifery practice: adapting and storytelling

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Background:

Improved outcomes with Midwifery Continuity of Carer (MCOC) is attributed to positive midwife-woman relationships developed during the antenatal period. However, little is known about how continuity of care creates these. Also, the reality is that MCOC and others midwife-led models, struggle to gain recognition or be embedded in the contemporary healthcare system. To advocate for this model a greater understanding of how it functions is needed.

Aim: To gain a better understanding of how the Midwifery Group Practice (MGP), a MCOC model, influences midwife-woman interactions in the antenatal appointment.

Method:

An Ethnographic study framed by feminist lens and a critical approach was undertaken at two hospitals in Sydney, Australia. Eighteen late pregnancy antenatal appointments were observed and videoed; 10 with the standard maternity care (SMC) system and eight with the MGP. Six staff focus groups were conducted. Two midwives and 11 women were interviewed. Thematic and content analysis were used.

Findings:

Results: Worry, both dysfunctional and functional, was identified as a common feature of the appointment.

Dysfunctional *worry* occurred when midwives invested more in the system and the standardised tasks than the woman. Functional *worry* reflected the concerns women report when pregnant; worry about their pregnancy, their baby, transition to motherhood and labour.

Moderation of these *worries* and on occasion the creation of hope was also identified when the midwife adapted. MGP Midwives had greater opportunity to adapt than those in SMC, however, regardless of model of care some midwives were adaptive experts. Adapting her practice and the appointment created more woman-centred interactions that were bidirectional and shared.

Conclusion:

Implications and Relevance: Transforming *worry* to *hope* may be the crucial factor of why MCOC improves outcomes for women and babies. Learning more about what adaptive practice is offers all midwives, regardless of where they work, the opportunity to enhance practice.

7.2-Gestational diabetes

O-7.2.1

Knowledge of gestational diabetes mellitus at first consultation in a multi-ethnic pregnant population in the Oslo region, Norway - a cross-sectional study

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Background:

Gestational diabetes mellitus (GDM) is an increasing problem among pregnant women globally and is associated with short- and long-term consequences for both mother and newborn. The aim of this study was to investigate knowledge of GDM among a multi-ethnic pregnant population at first consultation for GDM in the Oslo region.

Method:

We conducted a cross-sectional study using baseline data from a randomised controlled study performed at five diabetic outpatient clinics in the Oslo region. Pregnant women diagnosed with GDM following an Oral Glucose Tolerance test with a 2-hours blood glucose level of ≥ 9 mmol/l were included. Women filled out a questionnaire on an electronic tablet at the study entry. Descriptive statistics were performed and associations were investigated using Chi-square test and multiple logistic regression analysis.

Findings:

Of 238 women included in the study, 108 (45.4%) were native Norwegian speakers and 130 (54.6%) were non-native Norwegian speakers. Nearly 40% of the non-native Norwegian speakers were Asian (39.5%), 22.5% were African, and 15.5 % were from Eastern European Countries. Non-native Norwegian speakers were significantly more likely to have poor knowledge of GDM compared to native Norwegian speakers, adjusted OR = 4.5, 95% CI 1.61–12.5.

Conclusion:

Ethnic background was associated with knowledge level regarding prior knowledge of GDM. Health workers should be aware of the various knowledge levels concerning GDM, particularly for women with a mother tongue different from the national language. Women with a mother tongue different from the native language need linguistically- and culturally-adapted information regarding GDM.

O-7.2.2

Health literacy and gestational diabetes among ethnic minority pregnant women - A qualitative study.

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Background:

Gestational diabetes mellitus demands rapid health behaviour changes in order for the pregnant woman to obtain stable blood glucose levels. In Denmark, the general incidence of gestational diabetes mellitus is about 3%, but more than 4.5% among non-Western immigrants and descendants. From a public health perspective this can contribute to the undesirable inequity in health when comparing this specific group to the Danish background population. Women belonging to ethnic minorities may be particularly challenged by health behaviour changes due to educational, language and cultural barriers. The aim of the study was to explore how non-Western ethnic minority pregnant women in Denmark experience the hospital-based information about gestational diabetes mellitus and how they integrate this information into their everyday life. A secondary aim was to investigate how Health literacy and Distributed Health literacy affects this process.

Method:

Semi-structured, qualitative interviews with 11 women. Thematic analysis was conducted with a special focus on Health literacy as analytical approach.

Findings:

Three themes were identified: *Reaction to the diagnosis*, *Everyday life* and *Information needs*. All women felt sad and worried by the diagnosis. Some struggled to implement the recommended behaviour changes and many lacked supports from their spouse. The hospital-based information was positively evaluated, but in some cases the information was misunderstood. Social networks, language skills, and the ability to seek and assess information were important factors influencing the degree to which the women experienced gestational diabetes mellitus to be a challenge.

Conclusion:

Women were generally satisfied with the hospital-based information. Women with low health literacy/poor Danish language skills seem to be most challenged by the diagnosis. Future research should examine ways to organize patient-centred health care while simultaneously supporting women's opportunity to increase health literacy through e.g. social network and the Internet.

O-7.2.3

A qualitative study of pregnant women with gestational diabetes and their experience of control

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Background:

Gestational diabetes is associated with increased risk of obstetric and neonatal complications. Frequent control of the condition during pregnancy is therefore needed. Qualitative studies imply that pregnant women with gestational diabetes experience loss of personal control, when their pregnancies are subdued control and surveillance.

Aim The aim of this study is to gain understanding of pregnant women's experience of technological monitoring, potential medical treatment and planning of birth at gestational diabetes. The intention in the long term is to improve the quality of prenatal examinations at gestational diabetes from a patient-centred approach.

Method:

The study is designed as a qualitative study of 10 pregnant women with gestational diabetes. Focus in the study is the pregnant women's experience of control attending prenatal examinations of gestational diabetes. Participating observations were carried out of the women's encounter with healthcare professionals at obstetric outpatient clinic. Semi-structured interviews were conducted after prenatal examinations at University Hospital. Data were analysed from a theory-led perspective of power and control in the healthcare system.

Findings:

The expected findings are that women in some cases experience monitoring of gestational diabetes to be associated with personal security and in other cases experience it as a limiting factor. The results of the study are supposed to be applied to patient groups as diabetics, severely obese and other patients with chronic diseases, who must adapt recommendations of life style to daily life.

Conclusion:

As the study is ongoing it is not possible to provide a conclusion yet.

O-7.2.4

NORWEGIAN NURSE-MIDWIVES'S PERSPECTIVES IN THE PROVISION OF ANTENATAL DIABETES CARE IN AN OUTPATIENT SETTING- A QUALITATIVE STUDY

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Background:

In Norway, women with diabetes in pregnancy conditions may experience antenatal care in outpatient hospital setting, often within a team organisation, in which midwives have become a part. What do midwives perceive as their main contribution while providing antenatal care in an outpatient hospital setting?

Method:

Eight midwives, aged 37-58, seven out of eight had 20 years + midwifery working experience participated in individual qualitative interviews. A thematic analysis method described by Braun and Clarke (2006) was used to analyse the audio-recorded interview, which was transcribed into text.

Findings:

Three main themes was constructed in response to answer the question of the midwifery contribution which was i) approaching the women as individuals- to frame strengths and normalcy, ii) managing different task judiciously and iii) balancing different loyalties.

Midwives emphasised supporting the woman's strengths as well realises the importance of not undermining the woman's self-confidence by laying guilt on her. Working with short time frames and aligning with the other team member scheduled agenda, created feelings of being restricted to work according to their professional values and ideals, was seen as an occupational stressor, which contributes to feelings of professional shortcoming. In order to maintain a normal perspective in this high tech setting, some midwives mention that they still hold on to old school practise, by doing fundal –height measurement and the Leopold manoeuvre as it facilitated a better dialogue with the woman.

Conclusion:

Providing midwifery antenatal care with its complexity means working in the intersection of conflicting demands; fulfilling the women's expectations, one's own professionalism and the other team members' expectations of working efficiently. The midwifery contribution of keeping up with old school, may in this high tech setting be seen as an innovative practise, a way to creating an intersubjective space in which women's voices could be manifest.

7.3-Mental health and midwifery interventions

O-7.3.1

Women's experience of midwife-led counselling and its influence on childbirth fear: a qualitative study

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Background:

Women with childbirth fear have been offered counseling by experienced midwives in Sweden for decades without evidence for its effectiveness, in terms of decrease in childbirth fear. Women are usually satisfied with the counselling. However, there is a lack of qualitative data regarding women's views about counselling for childbirth fear. The aim was to explore women's experiences of midwife-led counselling for childbirth fear.

Method:

A qualitative interview study using thematic analysis. Twenty-seven women assessed for childbirth fear who had received counselling during pregnancy at three different hospitals in Sweden were interviewed by telephone one to two years after birth.

Findings:

The overarching theme 'Midwife-led counselling brought positive feelings and improved confidence in birth' was identified. This consisted of four themes describing 'the importance of the midwife' and 'a mutual and strengthening dialogue' during pregnancy. 'Coping strategies and support enabled a positive birth' represent women's experiences during birth and 'being prepared for a future birth' were the women's thoughts of a future birth.

Conclusion:

In this qualitative study, women reported that midwife-led counselling improved their confidence for birth through information and knowledge. The women experienced a greater sense of calm and preparedness, which increased the tolerance for the uncertainty related to the birthing process. This, in turn, positively affected the birth experience. Combined with a feeling of safety, which was linked to the professional support during birth, the women felt empowered. The positive birth experience strengthened the self-confidence for a future birth and the childbirth fear was described as reduced or manageable.

O-7.3.2

Addressing transition to motherhood by midwives in prenatal booking visits: findings from video recordings

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Background:

Objective to assess if and how primary care midwives address transition to motherhood at the first prenatal booking visit and to what extent there was a difference in addressing transition to motherhood between nulliparous and multiparous women.

Method:

Design Cross-sectional observational study of video-recorded prenatal booking visits

Setting and participants 126 video recordings of prenatal booking visits with 18 primary care midwives in the Netherlands taking place between August 2010 and April 2011.

Measurements Five observers assessed dichotomously if midwives addressed seven topics of transition to motherhood according to the Dutch guideline prenatal midwifery care and used six communication techniques. Frequencies and percentages were calculated. Differences between nulliparous and multiparous women were examined. The agreement between the five observers was quantified using Fleiss' Kappa.

Findings:

During all visits at least one of the seven topics of transition to motherhood was addressed. The topics mother-to-infant bonding and support were addressed respectively in 2% and 16% of the visits. In almost all visits the topics desirability of the pregnancy, experience with the ultrasound examination or abdominal palpation or hearing the foetal heartbeat and practical preparation were addressed. Open questions for addressing transition to motherhood were used in 6%. Dutch midwives addressed transition to motherhood mostly by giving information (100%) and by using closed-ended questions (94%) and following woman's initiative (90%). Nulliparous women brought up transition to motherhood on their own initiative more often than multiparous women (97% versus 84%).

Conclusion:

Although during every visit the transition of motherhood was addressed, the topics mother-to-infant bonding and support should get more attention. Midwives should improve addressing transition to motherhood by using more open questions. They should focus on taking the initiative to address the transition to motherhood in multiparous women themselves.

O-7.3.3

Support in labour and childbirth - a practical workshop

Liisa Svensson

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Background:

A lot is known about the importance of good support in labor and childbirth, yet the time for it and a common knowledge about how this support best is given is not always the case. As care around labor and birth becomes more and more medicalized, less focus is put to the emotional side of giving birth. In Sweden, the numbers of women developing fear of birth due to a previous negative birth experience increases. Partly, the reasons behind the increased numbers of women receiving special care for fear of birth, could have been prevented if they had had access to sufficient support when they previously gave birth.

Method:

Together with physiotherapist Susanna Heli I have developed a model of care (Trygghetsmodellen) with the goal of reducing stress and fear in the birthing woman and increase the feeling of confidence. By activating parasympathetic and the hormone oxytocin, the birthing woman is led towards an emotional state that will make the physiology of labor and birth function optimal.

Based on the Swedish book *Föda utan rädsla* (in English published as *Confident birth* 2012) by Susanne Heli we have taught tools for support to becoming parents, midwifery students and staff in maternity care since 2009.

Trygghetsmetoden, described in the book *Trygg förlossning - en omvårdnadsmodell för minskad stress och rädsla* (Gothia utbildning 2017), offers a structured way of understanding the importance of support in labor and childbirth and also *how* this support can be provided.

Findings:

Trygghetsmodellen is taught to midwifery students and have been taught to maternity care staff in many parts of Sweden. In for example BB Stockholm, Trygghetsmodellen was taught to all staff and has been implemented as part of their platform for offering support in labor and childbirth.

Conclusion:

Many midwives express a lack of education and training in giving support.

O-7.3.4

'Listen to me' Women's wellbeing in pregnancy and labor after interview intervention 'Listen to me': A retrospective observation study

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¹Landspítali, AKRANES, Iceland
, Iceland

Background:

Childbirth is a positive experience for most women, but 5-7 percent of women report negative birth experience. Knowledge about useful interventions to assist women in processing and resolving negative birth experiences is limited. The study aims was to explore women's experience of a special counselling clinic 'Ljáðu mér eyra' (Listen to Me), at Landspítali University Hospital in Reykjavík.

Method:

A retrospective descriptive study where questionnaires were sent out to all women (n=301) who attended the counselling clinic "Ljadu mer eyra" during the five years period 2006-2011. A total of 131 women completed and returned the questionnaire but the findings only refer to women who had given birth after the counselling (n=91). Descriptive statistics was used for analysis.

Findings:

The women rated their wellbeing good in subsequent birth after a counselling session "Ljadu mer eyra" and about 80% felt that the birth went well or rather well. They felt they had good support from professionals at the labor ward and partner during the birth. However, half of the women (50%) felt they were in control the whole time during birth or nearly the whole time during birth. In general, they were satisfied with pain management during birth, 38,2% received epidural anesthesia. About 75% of women were satisfied with the interview intervention at the counselling clinic.

Conclusion:

The satisfaction with the interview intervention "Ljadu mer eyra" is reassuring and motivates the team to enhance the service further. Only about half of the women felt in control throughout the birth but yet felt the birth had gone well, felt reassured and satisfied with the support they received. Due to the low attendance rate one can speculate if the service is accessible to all women who might need it. Midwives need to emphasize this option within birth institutions and antenatal clinics.

7.4-Fertility and Preconception care I

O-7.4.1

Midwives' work with and attitudes towards contraceptive counselling and contraception among women with intellectual disability - focus group interviews in Sweden

Berit Höglund

Women's and Childrens Health, UPPSALA, Sweden

Background:

Family planning counselling is essential part of sexual and reproductive health care, but professionals often fail to offer sexual and reproductive health services to women with intellectual disability (ID) based on the misconception of inactive sexuality.

Method:

Five focus group interviews were performed with 19 nurse-midwives at five antenatal/family planning clinics in mid-Sweden between December 2016 and February 2017.

Findings:

The midwives strived to enhance informed choice, whenever possible, and tried to maintain a neutral attitude during the counselling. They wanted to ensure the best-adapted contraceptive method balanced against any risk of long-term use and possible side effects for the individual woman. The nurse-midwives requested the need for teamwork

and inter-professional support to improve health care, security and access to other related services around these women.

Conclusion:

Few women with ID request contraceptive counselling, which limits midwives' knowledge, experience and competence. Nurse-midwives therefore plan the visits carefully and strive to enable informed choices about contraceptives for these women. Increased teamwork could be a way to strengthen the nurse-midwives' role and thereby improve the counselling.

O-7.4.2**Midwives have a golden opportunity to talk about fertility and preconception health - a randomized controlled trial (RCT).**

Yvonne Skogsdal¹, Helena Fadl², Jan Karlsson², Yang Cao², Tanja Tydén²

¹Region Örebro län, ÖREBRO, Sweden
, Sweden

Background:

Studies have shown that women lack knowledge about fertility issues. Preconception health is health prior to pregnancy. Women's age, weight, use of tobacco and alcohol are some factors that have impact on fertility and pregnancy outcome, showing that pregnancy planning is important. One way to increase knowledge about fertility and preconception health is a tool called Reproductive Life Plan Counseling (RLPC). The aim with the study was to evaluate the effect of RLPC.

Method:

In this RCT study women (n=1946) attending contraceptive counseling were asked to participate in an intervention. Before the counselling, participants answered a waiting-room questionnaire about pregnancy intention, fertility and preconception health. Then they were randomized to intervention group (IG) or control group (CG). Both groups received standard contraceptive counseling. Women in IG also received RLPC and a specially designed brochure about fertility and preconception health. Two months later a postal questionnaire was sent to women in IG and CG.

Findings:

The response rate was 62% (n=1198, CG, n=606 and IG, n=598). Knowledge about fertility and preconception health was low at baseline. After the intervention women in IG significantly increased ($p<0.05$) their knowledge about age and fertility, the fecundity of an ovum, the likelihood of getting pregnant at time of ovulation, and the chances of having a baby with help of in vitro fertilization. Also the awareness of preconception health increased i.e. to stop using tobacco, refrain from alcohol, to be of normal weight and to start with folic acid before a pregnancy ($p<0.05$).

Conclusion:

Health care providers should encourage women to reflect on their reproductive life plans. Midwives are key persons to inform women about many aspects considering reproduction.

O-7.4.3**Important but far away - Adolescents' beliefs, awareness and experiences regarding fertility and preconception health - A qualitative study**

Magdalena Mattebo¹, Maria Ekstrand Ragnar², Maria Grandahl², Jenny Stern²

¹Mälardalen University, VÄSTERÅS, Sweden
, Sweden

Background:

The aim was to explore adolescents' beliefs and awareness regarding fertility and preconception health, as well as their views and experiences of information about fertility and preconception health directed at their age group.

Method:

We performed seven semi-structured focus group interviews among upper secondary school students (n=47) aged 16–18-years in two Swedish counties. Data were analysed by qualitative content analysis.

Findings:

One theme ('important but far away') and five categories ('starting a family far down on the list'; 'high awareness but patchy knowledge of fertility and preconception health'; 'gender roles influence beliefs about fertility and preconception health'; 'wish to preserve fertility and preconception health in order to keep the door to procreation

open'; 'no panacea - early and continuous education about fertility and preconception health') emerged from the interviews. Participants recognised the importance of preconception health and were highly aware of the overall importance of a healthy lifestyle. Their knowledge, however, was patchy and they had difficulties relating to fertility and preconception health on a personal and behavioural level. Participants wanted more information but had heterogeneous beliefs about when, where and how this information should be given.

Conclusion:

The adolescents wanted information on fertility and preconception health to be delivered repeatedly as well as through different sources.

O-7.4.4

Evaluation of an evidence based website supporting midwives in counselling about fertility and preconception health

Maria Ekstrand Ragnar, Jenny Niemeyer Hultstrand, Melinda Koo Anderson, Margareta Larsson, Tanja Tydén
Uppsala University, UPPSALA, Sweden

Background:

Preconception health is of great importance for both women and men as well as for their offspring. Smoking, alcohol, certain medications, nutritional status, weight and age prior to conception have impact on fertility and pregnancy outcome, but this knowledge is often limited among women and men. We have recently developed a multilingual, mobile friendly website, <http://www.reproduktivlivsplan.se>, including a tool called Reproductive Life Plan (RLP) to increase knowledge about fertility and preconception health and enable individual reproductive life planning.

Our aim is to spread information about <http://www.reproduktivlivsplan.se>, and to further evaluate it's usefulness among healthcare providers.

Method:

During the development of the website, the content, design and layout were evaluated among nursing students, an expert group of researchers and clinicians, and midwives in Sweden (Ekstrand Ragnar et al., 2018).

During the fall of 2018 we will continue to evaluate the website. All midwives (n=73) working at 25 primary healthcare clinics in Uppsala region are informed about the project, invited to use the website for two months and thereafter to fill out a 30-item questionnaire, comprising multiple choice- and open-ended questions about the adoption of RLP and the website. Primary research questions are; *what is it like to work with RLP based counselling with support of the mobile friendly website at consultations in primary health care? And do you consider the website to be a useful tool in your daily work?*

Findings will be presented descriptively and responses to the open-ended questions will be systematically organized in categories according to manifest content analysis.

Findings:

The website's content, layout and userfriendliness, were positively evaluated. It is currently available in Swedish, English, French, Spanish, Greek, Arabic and Somali. We will present more results from our ongoing evaluation.

Conclusion:

So far, the website has been well received. Midwives are key persons for successful implementation.

7.5-Teaching and learning methods I

O-7.5.1

Neither clinic nor lectures - but a powerful hybrid learning environment. Facilitating students' interprofessional and didactic competencies in a student-led clinic offering antenatal classes.

Nynne Sindberg, Anne Mette Rasmussen, Mulle Signe Nielsen
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Background:

When identifying the future challenges in the health professions, there has been a great emphasis in supporting health professions to work interprofessional and innovative. In Denmark, it has resulted in a change in the curriculum for all midwifery students and all other health professions. This curriculum define goals and provide the educational frame, but doesn't prescribe the means.

As an answer to this call, the midwifery education at Copenhagen University College developed a hybrid learning setting that cross borders between clinic and theory, and prescribe an effective way to teach interprofessional and didactic competencies.

The Midwifery students cowork with students from nutrition and health and physiotherapy. They plan and teach antenatal classes supervised by senior lecturers.

Method:

We have thoroughly evaluated the students learning outcomes in a mixed methods design, including a survey in 2014 (70% response rate) and seven focus groups in the period 2011-2017.

Findings:

The survey show that the hybrid learning setting is a highly effective way to facilitate interprofessional, innovative and reflective competencies. The focus groups provide explanations on why and how it encourages the students towards becoming reflective and confident collaborative health professionals.

Being a student in a safe setting, where learning is the primary focus, allow them to be more innovative and creative which enables them to teach antenatal classes in new ways.

When working as a team, in a constructed but realistic setting, the students learn about, from and with each other, both in the planning and teaching process hereby supporting the student's opportunity to develop their interprofessional competences.

Conclusion:

A teacher facilitated but student-led health clinic offering antenatal classes has proved to be a powerful learning setting for students to develop interprofessional and didactic competencies. Student-led clinics is common in other parts of the world, but is yet to be developed in the Nordic countries.

O-7.5.2

Finnish midwifery students need more sexual and reproductive health education

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Background:

Many women have sexual problems, for example, due to recent delivery, incontinence or relationship problems. Midwives are experts in women's health and therefore meet patients with sexual problems. However, according to previous studies, midwives seldom discuss sexual issues with their patients. The objective of our study was to evaluate how Finnish midwifery students estimate their knowledge of sexual and reproductive health.

Method:

A web-based questionnaire was sent to all Finnish final year midwifery students in September 2018 to evaluate their competence in dealing with patients with sexual problems and also to evaluate the quality and quantity of sexual and reproductive health studies they have received.

Findings:

Data collection is still in process. The preliminary results show that midwifery students seldom meet patients with sexual problems during their studies. The respondents were found to be very interested in sexual and reproductive health studies. However, 50% of the students felt they had insufficient education in this area. The students reported that they would need more education concerning the etiopathogenesis and treatment of dyspareunia, sexual problems caused by infertility and its treatments and treatment of decreased libido. The students evaluated their knowledge to be best in sexual diversity. In addition, they considered themselves to be quite fluent in addressing patients with sexual issues. The respondents considered lack of experience and training to be the main reasons for not addressing sexual issues with their patients.

Conclusion:

To conclude, these preliminary results show that Finnish midwifery students are interested in sexual and reproductive health studies. To have more self-confidence in meeting and treating these patients, more education would be needed in this field.

O-7.5.3

Perinatal mental health - beyond professional borders

Joanna Andrews

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Background:

Effective and coordinated team working is the key to achieving a safe perinatal period for mothers, babies and families (Cornthwaite et al, 2015).

Interprofessional education is acknowledged as being beneficial for improved patient outcomes across a variety of settings (Davies, Fletcher & Reeves, 2016). This is supported by the National Maternity Review which recommends that multi-professional learning should become a central component in pre-registration education (NHS England, 2016). In the most recent MBBRACE report a key area for action is improving care of women with mental health problems (MBBRACE, 2017). There is also increasing acknowledgement that fathers experience perinatal mental health problems including postnatal depression, anxiety and post-traumatic stress disorder (Condon, Boyce & Corkindale, 2004; Darwin et al., 2017, White, 2007).

Method:

Midwifery students have provided feedback that they would like more sessions covering perinatal mental health. This is reflected in a report by the RCM where student midwives have little confidence in recognising serious mental illness (RCM, 2014) and some mental health nurses lack confidence when working with pregnant women and new families (McConochie & Whitford, 2009). A multi-professional team collaborated to formulate an inter-professional education workshop with mental health nursing students and midwifery students. The aims of the workshop reflect the requirement for the integrative model of care to address the fragmentation of perinatal mental health services to facilitate holistic care (Bayrampour, Hapsari & Pavlovic, 2018).

Findings:

This workshop will mirror the one we deliver to our inter-professional undergraduate students offering tips to delegates in improving collaboration between different practitioners working within perinatal mental health services.

Conclusion:

Evolution of the workshop is based on evaluations from the participating students which not only reinforced the original rationale for the session but have indicated that they benefited from sharing experiences from practice and learning with, from and about each other's roles and responsibilities.

O-7.5.4

Offering weight management support to pregnant women with obesity: an interview study with midwives.

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Background:

The prevalence of overweight and obesity is increasing worldwide. The health risks associated with maternal obesity for the mother and baby are well known and it is therefore important that women are supported with weight management in pregnancy. Life-style changes that limit weight gain lessen the risks for both mothers and infants. Midwives have an important role in supporting women to make healthy life-style choices. The purpose of this study was to explore how midwives' offer support to women with obesity regarding antenatal weight management.

Method:

Semi-structured interviews were conducted with 16 midwives working in antenatal health care. Interviews were conducted shortly after new guidelines on care for pregnant women with obesity had been introduced. The interviews were recorded, transcribed and analysed by thematic analysis.

Findings:

From the midwife's experience, three themes were identified; *use a conscious approach, invite to participation, and have a long-term health perspective.*

Conclusion:

These study midwives' experiences showed that pregnancy, the unborn child, and the desire not to gain weight, were important motivators for the women. The midwives focused on the relationship with the woman, to be factual and non-judgmental, and to make care plans together with the woman. They encouraged small steps in a positive direction and saw these as important and as an investment for the future for both the woman and her family.

Oral Session 8

8.1-Midwifery models of care III

O-8.1.1

Advancing health equity for childbearing adolescents: Outcomes of midwife-led care in community birth settings

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Background:

The United States (US) has the highest adolescent birth rate of all high-resource countries at 20.3/1000 females ages 15-19. Adolescents experience poor maternal and neonatal health outcomes, societal stigma, and discrimination in the healthcare system. Unresolved is whether these poor outcomes are due to biological immaturity, psychosocial, and/or sociopolitical factors. Our objective was to examine outcomes of midwife-led care in community birth settings for childbearing adolescents.

Method:

Data are from medical records collected using the Midwives Alliance of North America Statistics Project (MANA Stats), 2012 - 2016. MANA Stats contains planned, midwife-led community (home or birth center) births in the US. We compared outcomes for adolescents (ages 11-19, n=356) to those of young adult women (ages 20-24, n=5053), using Fisher's exact tests.

Findings:

Of the 356 adolescents, 20.3% were women of color, 44% were on public food assistance, and 66% were eligible for low-income health insurance. At the onset of labor, 42.7% planned home births and 57.3% planned birth center births. There were no cesareans in either group. There were no low birthweight infants nor intrapartum or neonatal deaths in the adolescent group, excluding anomalies (0.8% LBW, ages 20-24, $p = 0.11$; 3 non-anomaly deaths, ages 20-24). There were no significant differences for hemorrhage $>1000\text{cc}$ ($p=0.77$), maternal hospitalization ($p=0.74$), genital tract trauma ($p=0.10$), neonatal hospitalization ($p=0.88$), or NICU admission ($p=0.12$) between groups. 88.2% of adolescents were exclusively breastfeeding at 6 weeks, compared to 93.9% for ages 20-24 ($p < 0.001$). Multivariable results will also be presented.

Conclusion:

Demographic and clinical differences between adolescents and their young adult counterparts did not translate to differences in outcomes. Adolescents in this sample fared better than population-level outcomes for US adolescents, indicating a need to explore provider bias in adolescent pregnancy care and to position midwifery as a health equity strategy for childbearing adolescents.

O-8.1.2

Caseload midwifery in Stockholm

Marie Ekborn

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Background:

In Sweden we have had very few alternative models of care for pregnancy and birth. The only modified birth center had to shut down 3 years ago due to disagreements of the care though the figures both obstetric and economic were good. The emotional reasons were many and split the midwives in two, those who wanted the care and those who didn't.

Many midwives left the labor or even their profession and are now working in other fields.

In order to offer pregnant women and midwives an alternative we at Karolinska hospital started a caseload midwifery project called "My midwife".

The inspiration and a lot of help we got from colleagues in Denmark. A network of midwives in Sweden has started who also like to open a caseload midwifery.

Method:

This is a project that later will be valued scientifically.

How do you implement a caseload midwifery and what kind of problems has to be solved to succeed?

Findings:

We will see the scientific findings in a couple of years. In the meantime we have to really on the project moving forward and solving the different kind of problems as the come.

Conclusion:

The conclusion is that my experience as head of midwifery of a birth center has helped me alot in thinking how to proceed the different steps in the caseload midwifery project. Working hours, laws and agreemnt is difficult and has taken alot of time to convince the union.

This far many of the women who have registred with us are so thankful to have a midwife they will know at birth. Some of them have been so scared of pregnancy and birth that they first make sure they are in the caseload before starting to get pregnant.

Continuity of care is so fantastic for women thith birth anxiety and mental illness.

O-8.1.3**Effectiveness of caseload midwifery care in promoting maternal physical, mental and social health during pregnancy and birth**

Jenny Gamble, Valerie Slavin, Debra Creedy
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Background:

Poor maternal mental health is one of the greatest threats to the childbearing population. The burden is significant for women, detrimental to infant-child development, impacts negatively on family functioning and undermines the fabric of society. While most research focuses on secondary prevention interventions, primary prevention is crucial. Caseload midwifery is a model of care well placed to address this issue. While caseload midwifery significantly improves clinical outcomes for mother and baby compared with other models of care, to date few studies have reported the effects of caseload midwifery in promoting physical, mental and social well-being.

Aims: To report the impact of caseload midwifery on women's physical, mental and social wellbeing compared to non-caseload models of care.

Method:

A prospective 2-arm matched cohort study using the International Consortium for Health Outcomes Measurement (ICHOM) Standard Set of Outcome Measures for Pregnancy and Childbirth. The Standard Set includes validated self-report measures of health, wellbeing and satisfaction. In line with ICHOM recommendations selected perinatal outcomes are obtained from routinely collected electronic hospital data. Consenting women (n=309) were invited to complete surveys at 6 time-points from early pregnancy to 12-months postpartum. This paper reports on data collected at 24 and 36 weeks gestation and at birth.

Findings:

Recruitment and data collection figures indicate a high response rate with an 85-90% retention rate at each time-point. We will compare models of care using data on pregnancy and birth outcomes impacting women's quality of life, including incontinence, pain and fatigue, as well as more commonly reported clinical, psychosocial and mental health outcomes.

Conclusion:

Caseload midwifery models achieve excellent clinical outcomes and are in high demand by women. Extending our understanding of the caseload midwifery to include outcomes important to women may help facilitate universal access to this model.

O-8.1.4**Experiences and outcome of caseload midwifery - a mixed methods study**

Ingrid Jepsen
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Background:

Caseload midwifery is a model of care focusing on continuity of care through pregnancy and childbirth. International research has demonstrated that caseload midwifery is rewarding for pregnant women and midwives, and improves labour outcomes, but there are also contradictory statements about midwives' experiences. Danish research is missing.

Aim: The overall aim of this mixed methods study was to expand the understanding of caseload midwifery by integrating findings from both qualitative and quantitative studies.

Method:

Initially, the researcher explored midwives' experiences through participant observations in antenatal clinics, followed by interviews with caseload midwives (Study 1). This study inspired a survey on burnout that used a validated questionnaire (Study 2). Thereafter, the researcher conducted participant observations during labour to explore couples' experiences, followed by interviews (Study 3). Concurrently, Study 4, a register-based cohort study, involved the collection of three years of data from the obstetric database (Study 4).

Findings:

Results: The findings from the four studies were integrated during interpretation, and two major themes emerged: "A positive cycle in caseload midwifery," and "A negative cycle in caseload midwifery."

Conclusion:

Both midwives and couples experienced significant well-being. The midwives experienced high job satisfaction and low levels of burnout compared to standard care. The women appreciated caseload midwifery and their partners also benefitted from it, as they all felt that the midwives acknowledged and treated them as individuals. This good relationship led to a positive cycle in which mutual recognition and consideration supported the sense of coherence. However, the experience of working in caseload midwifery seemed to depend on the midwives' ability to handle the strong obligation always to perform well and to be there for all, as this could lead to a more active approach to labour.

8.2-De-medicalization of childbirth

O-8.2.1

In- or outpatient induction of labour with High or Low Dosage misoprostol - a Danish descriptive cohort study 2015-17

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Background:

The rate of induced labour in Denmark 2000-2012 has increased 108% and today more than one in four deliveries are induced. At Nordsjællands Hospital uncomplicated pregnant women have since 2016 been offered post term induction as an outpatient procedure. Simultaneously the local standard procedure changed from 50 µg oral prostaglandin-E1 analogue misoprostol twice or three times daily, to 25 µg 8 times daily.

Aim To examine the effect of the current Low Dosage procedure (25 µg) compared to the former High Dosage (50 µg) in terms of induction time, maternal and foetal outcomes and the risk of hyper stimulation.

Method:

Data from June 2015 to December 2017 was included either retro- or prospectively. Comparable baseline, demographic and obstetric data from respectively a High Dosage protocol and a Low Dosage were retrieved from the local medical files. Descriptive statistics, Pearson's chi-squared tests, Kaplan-Meier survival, Cox and logistic regression analyses were performed.

Findings:

The study included 1062 induced deliveries. The two groups differed in rates of plurality, indications of induction, place of induction and smoking status. The induction time was significantly less protracted (>72 hours) in the Low Dosage group. Women in the Low Dosage group had increased chances of a vaginal delivery and less often needed additional induction. However they had a non-significant increased risk of uterine hyper stimulation. Their risk of delivery by vacuum extraction was significantly increased, whereas delivery by caesarean section was slightly decreased. The risk of meconium-stained liquor was significantly decreased as well as a non-significantly decreased risk of transfer to NICU.

Conclusion:

The Low Dosage induction protocol increased chances of a vaginal delivery however more by vacuum extraction. The number of protracted inductions, the need for additional non-medical interventions as well as the risk of meconium-stained liquor was all reduced. The risk of uterine hyper stimulation was non-significantly increased.

O-8.2.2

De-medicalization of birth by reducing the use of oxytocin for augmentation among first-time mothers - a prospective intervention study

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Background:

The use of synthetic oxytocin for augmentation of labor is rapidly increasing worldwide. Hyper-stimulation is the most significant side effect, which may cause fetal distress and operative delivery. We performed an intervention consisting of an educational program and modified guidelines to achieve a more appropriate use of oxytocin.

Method:

This study included 431 first-time mothers at term with spontaneous onset of labor before and 664 after the intervention. Our outcomes were prevalence and duration of oxytocin treatment, mode of delivery, indication for operative delivery, episiotomy, anal sphincter tears, bleeding, labor duration, pain relief and the effect of oxytocin on mode of delivery.

Findings:

After the intervention, 52.9% were diagnosed with dystocia, compared with 68.9% before ($p < 0.001$). A significant reduction in oxytocin rates from 63.3% to 54.1% ($p < 0.001$) was obtained. More women without dystocia were augmented after the intervention (18.9% vs 8.4%, $p < 0.001$). The median duration of oxytocin treatment was reduced by 72% (from 90 to 25 min) without increasing the median duration of labor (385 min in both groups). There was a moderate reduction in operative vaginal deliveries from 26.9 to 21.5% ($p = 0.04$), and dystocia as an indication for these deliveries increased ($p = 0.01$). There was a moderate increase in caesarean sections from 6.7 to 10.2% ($p = 0.05$), but no increase in dystocia as an indication for these deliveries. Women receiving oxytocin were more likely to have an operative vaginal birth, even after adjusting for birth weight, epidural analgesia and labor duration, OR: 2.1 before and 2.7 after the intervention.

Conclusion:

Augmentation with oxytocin should be used with caution and only when medically indicated. Even more modified guidelines for augmentation than the ones applied in this study might be appropriate.

O-8.2.3

High-dose versus low-dose oxytocin for labour augmentation: a randomised controlled trial

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Background:

Delay in labour due to ineffective uterine contractions is a major problem in obstetric care and a main reason for the increased rate of caesarean section (CS), particularly among nulliparous women. Infusion with synthetic oxytocin is a commonly used treatment of hypotonic uterine contractions however there is a gap of knowledge concerning which dosage of oxytocin should be used, both starting dose and increment dose of oxytocin.

The aim was to ascertain the effect on CS rate and childbirth experiences of high-dose versus low-dose oxytocin for augmentation of delayed labour in nulliparous women.

Method:

In a randomised double-blind controlled trial conducted in six labour wards in Sweden, consenting nulliparous women with a defined delayed progress were randomized to receive a regimen of either high dose or low dose of oxytocin (33.2 respectively 16.6 microgram oxytocin in 1000 ml isotone saline solution). Primary outcome was CS rate and womens childbirth experiences measured with the three domains of the Childbirth Experience Questionnaire (CEQ): Own capacity; Perceived safety; and Participation.

Findings:

Augmentation with a high dose of oxytocin did not lower the CS rate in nulliparous women with spontaneous onset of labour, compared with a low dose, despite a higher total dose and higher dose increment. More events with tachysystole together with signs of fetal distress occurred with a high-dose regimen. Childbirth experiences in the three domains did not differ between the randomised groups but were associated with mode of birth.

Conclusion:

This RCT shows that a high dose of oxytocin was not superior to a low dose in terms of intrapartum CS outcome. As more tachysystole and signs of fetal distress occurred with a high-dose regimen and childbirth experience did not differ between the two dosage groups, a low-dose oxytocin regimen is recommended for the treatment of augmentation of labour.

O-8.2.4

Postpartum hemorrhage after vaginal birth - why is it still a challenge?

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Background:

Why is severe postpartum hemorrhage (PPH) on an increase in high-income countries? Which risk factors are involved? – Maternal age or body mass index, birthweight or gestational age? Obstetric interventions may also have an impact as induction of labour and augmentation in labour are more frequently used. Severe PPH are associated with maternal morbidity and mortality. Consequently, PPH is used as quality indicator in obstetric practice.

The aims of the study is to identify risk factors for PPH ≥ 1000 ml after vaginal birth. Further, to estimate the prevalence and mean amount of severe PPH in different clinical case scenarios in childbirth.

Method:

A register-based cohort study including women with singleton pregnancy giving birth vaginally at term to a live-born child at Aarhus University Hospital from 2004 to 2012. PPH was defined as blood loss ≥ 1000 ml within two hours postpartum. Potential risk factors such as maternal and fetal characteristics, obstetric interventions during birth and genital tract tears will be identified using univariable and multivariable logistic regression. Results will be presented as odds ratios with 95 % confidence interval.

Findings:

Among 32 023 births, 1832 women (5.7 %) experienced a PPH at ≥ 1000 ml. The analyses of maternal and fetal characteristics, antepartum- and intra partum risk factors are pending and will be presented at the conference. Moreover, the results from the different clinical case scenarios will be presented in a visual chart.

Conclusion:

The results from this study may be used by midwives to ensure timely prevention and sufficient treatment of severe PPH. Further, to draw attention to how interventions in labour and genital tract tears may influence the amount of PPH. Some midwives and obstetricians may perhaps need to re-think their perception of cause and management regarding PPH to ensure women achieving the best practice of care.

8.3-Mental health in pregnancy

O-8.3.1

What do we know about pregnant women and usage of SSRI's?

Margrethe Nielsen

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Background:

Since the SSRI's were launched on the Danish market many young women, also pregnant women, have been treated with these drugs for either depression and / or anxiety. The general practitioner often starts the treatment but the midwife will meet the pregnant woman during the rest of her pregnancy. What are the dilemmas with both screening and drug treatment in pregnancy and how can the midwife contribute?

Method:

A literature study has been carried out in order to explore the evidence behind screening for depression, treatment with SSRI's for depression and /or anxiety in pregnancy. Further a register based study has been carried out in order to define the number of pregnant women treated with SSRI's and other antidepressants and how this has changed over time.

Findings:

The register-based research shows that the number of pregnant women treated with SSRI's or other antidepressants increased until 2011 and thereafter decreased slightly. The literature search has shown that the evidence for screening for depression during pregnancy will result in many false positive diagnosis and overdiagnosis. The evidence for treatment with SSRI's is vague and is connected with risk for the fetus and the newborn child.

Conclusion:

There seems to be a true dilemma because some of these women are in need of help. The dilemma will be discussed. Midwives should involve themselves into professional and scientific discussions about the usage of screening and antidepressant treatment for depression and inform women about the risks.

O-8.3.2

Is perinatal distress the main reason for sick leave certificates issued to distressed women?

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Background:

Suboptimal mental-wellbeing is the main cause of sickness absence from work among the general population. Pelvic pain is, however, the main cause of sickness absence during pregnancy. The need has therefore risen to research possible association between sick leave certificates issued during pregnancy and women's report of perinatal distress.

Method:

Part- and full-time sick leaves certificates were retrieved from electronic medical records (EMR) of 560 pregnant women in Iceland. These women participated in a semi-structured interview after being screened for distress in a larger study. Three hundred fifty-eight women were assigned to the perinatal distressed group (PDG) and 202 to the non-distressed group (NDG). The ICD10 and/or ICPC classified reasons, identified with each sick leave were also retrieved from the EMR. The reasons were merged into nine categories.

Findings:

Three hundred and three women (54.1%) received from one to six sick leave certificates. There was no significant difference between women in the two groups until it came to the second sick leave issued. Then women in the PDG were more likely to receive a full-time sick leave. They also received sick leave sooner during the pregnancy than women in the NDG. One hundred forty-eight reasons were documented with the certificates. Pelvic pain was the most common reason and only 16(5.2%) women received sick leave due to distress. A link was also found between issued sick leave and dissatisfaction with the household task.

Conclusion:

Distressed women receive sick leave sooner during pregnancy than non-distressed women, but not due to distress. There might be a connection between sick leave, distress, and the women's social situation. These issues need to be identified and acknowledged during pregnancy among midwives and physicians, as distressed women and their families should be offered consultation and support during pregnancy.

O-8.3.3

A nocturnal voyage in unknown waters - Women's experiences of late-term pregnancy

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², Sweden

Background:

Late-term pregnancy is related to increased risk of serious complications both for the baby and the mother as the pregnancy proceeds. The concept of transition to motherhood is described as a pivotal and life-changing event. Women may experience late-term pregnancy as a mentally strenuous period characterised by worries and anxiety. The aim of this study was to describe women's experiences of a late-term pregnancy ≥ 41 gestational weeks (GW).

Method:

In-depth interviews were performed with ten women, two to seven months after childbirth during October 2013–November 2014, transcribed verbatim and analysed using a lifeworld hermeneutic approach.

Findings:

Six themes emerged from the analysis: Doubting the body's ability to cope with the transition from pregnancy to giving birth, The importance of their partner's support during the sea voyage, Lacking clear guidelines for the voyage, Worrying about the cargo at the end of the voyage, How the voyage turned out, and Thoughts related to a future voyage

Conclusion:

The women described their worries about their unborn child, the lack of clear guidelines and their concern that their bodies would not cope with the transition from pregnancy to motherhood. The women did not feel sufficiently empowered to trust their body's transition from pregnancy to childbirth. It is vital that midwives give clear guidelines and empower the women to trust their body's ability to give birth. This transition is important in relation to positive thoughts towards future pregnancies and births but also as childbirth experiences will remain with the women for a long time.

O-8.3.4**Transition to Parenthood: Alcohol Consumption during**

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²University of Applied Sciences and Arts Western Switzerland (HES-SO), LAUSANNE, Switzerland

Background:

Pregnancy is often accompanied by a series of health guidelines, which can lead to changes in daily habits for pregnant women and their partners. The question of alcohol consumption during pregnancy, is often a very discussed topic. Until now only very few studies have looked at the pregnant women's and partners' perceptions of this topic, as well as more generally, at the way they perceive alcohol as risk during pregnancy.

In this study we are interested in the perception and experience of future parents regarding the issue of alcohol consumption during pregnancy and breastfeeding. In this presentation, we would especially like to describe the transitional process that future parents go through during pregnancy.

Method:

We conducted qualitative individual interviews with 23 couples during pregnancy, speaking to the future mothers and fathers separately. A total of 46 interviews were transcribed and analysed by thematic analysis.

Findings:

For all participants alcohol consumption was a relevant theme during pregnancy and was reflected in the context of changing roles during transition to parenthood. Most of the women we spoke to reported a high reduction of alcohol consumption during pregnancy and consumed little to no alcohol. Male partners supported the decision, but the decision was mostly left to the expecting mothers. This process of changing drinking patterns was motivated by concerns for the possible risk alcohol could pose to the baby's health and was sometimes perceived as difficult, depending on factors like previous consumption, social circle and views on guidelines and the medicalization of pregnancy in general.

Conclusion:

Results will contribute to understanding the transition to parenthood with a special focus on lifestyle changes.

8.4-Fertility and Preconception care II**O-8.4.1**

Innovation and entrepreneurship in midwifery: the story about the Hegenberger Speculum

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²OmniView Speculum, KARREBÆKSMINDE, Denmark

Background:

Postpartum perineal repair can be challenging in relation to working conditions for midwives and obstetricians. Limited visual overview and patient discomfort during the procedure may stress the clinician.

Method:

Midwife Malene Hegenberger has developed a new speculum for improved working conditions during postpartum perineal repair.

Malene has received investments from the Ministry of Innovation and Research and a number of private investors during 2018. A patent is pending, and the product may be ready for marketing and sales by summer 2019.

Findings:

The speculum will be tested in Scandinavian hospitals during January-March 2019.

Features such as usability, patient experiences, potential time savings and clinical effect on perineal repairs will be monitored

Conclusion:

This workshop will present the lived experience and story of a female entrepreneur with an idea and product that may improve perineal repair on a global scale.

O-8.4.2

Why is conscientious objection to abortion a problem for midwives?

Valerie Fleming¹, Beate Ramsayer²

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, United Kingdom

Background:

With the exception of Malta and Lichtenstein, abortion is legalised to varying degrees throughout Europe. Despite this, abortion remains a very volatile subject, with arguments highly polarised. This presentation, however, is not about the rights and wrongs of abortion but those of midwives to make a conscientious objection to providing this service. The topic of conscientious objection has also gained prominence recently in several European countries although conscience as a core element of human rights is protected in treaties such as the European Convention on Human Rights. Of the countries permitting abortion, 25 include a conscience clause sanctioning health care providers, with a legitimate objection, to desist from participating. Those without a conscience clause are Iceland, Finland, Sweden, Lithuania and parts of Switzerland.

The aim of this study was to determine the case for conscientious objection to objection by midwives through investigating the numbers of late abortions in each of the 32 countries in relation to the numbers of births and practising midwives.

Method:

We included 32 European countries. Our major data source on births and abortions was ministries of health or government statistical departments. The number of midwives was obtained from Eurostat and OECD. The data we analysed derive from the most recent available figures.

Findings:

Preliminary findings indicate that all countries provided the number of births, 31 the number of midwives, 25 numbers of abortions and 16 numbers of late abortions. 5,250,066 live births and 982,378 abortions were reported in total. Of the 16 countries that provided numbers of late abortions 804,609 abortions and 56,872 late abortions were reported. There were 176,595 midwives working in the sample countries.

Conclusion:

Further statistical analysis is currently being undertaken and the completed study will be presented at the conference.

O-8.4.3

Conscientious objections force women to seek abortion health care across borders

Sara Bäckström
RFSU, STOCKHOLM, Sweden

Background:

In many Countries where abortion is legal it is also regulated that personnel can refuse to participate in abortion care, claiming ones conscience. A conscience clause effects the availability and accessability of abortion. It forces some women to either pay for an illegal abortion or to go across borders to get an abortion, while socio-economically vulnerable women with possibility go abroad are left to carry a full pregnancy against their will or seek unsafe alternatives to terminate the pregnancy.

In Sweden the preparatory work for the 1974 Abortion act there was a discussion about conscientious objection, but Sweden chose actively not to legislate on that issue. It is considered to be a matter for the employer to organize their workplace, and it should be organized so that, in consideration of the woman seeking abortion, individuals due moral or religious beliefs have difficulty accepting such work, should not have employment there.

Method:

Discipline overriding methods and Eu-legal method

Findings:

This has been the line maintained for 40 years but is now challanged by two midwives, with help from the Alliance Defending Freedom (USA). They have sued Sweden in the Court of human rights (ECtHR), claiming Sweden has violated their right to religious belief and their right to have a conscience.

Conclusion:

There is a clash between different interests and human rights. By refusing to care some patients the staff's right is set up in the main room, instead of the patient's right to health care. RFSU can see how the anti choice movement, especially on the European level, is trying to make restrictions on abortion in the long term attempt to make abortion prohibited using arguments taken from human rights conventions. In this workshop RFSU wants to discuss conscientious objections and why RFSU say this has no part of abortion care.

O-8.4.4

Contraceptive counselling in the context of an abortion - A qualitative interview study of women's experiences

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²Jönköping University, JÖNKÖPING, Sweden

Background:

The time of abortion counselling represents an important opportunity to satisfy women`s needs for contraception and prevent repeat unintended pregnancies. However, there is still limited knowledge of this problem from the woman`s point of view. The aim was to identify and understand women`s lived experiences of contraceptive counselling given at the same time as abortion counselling.

Method:

Thirteen women aged 20–39, who had experienced an abortion and the related counselling were interviewed 4-6 weeks post abortion. The women were involved from five hospitals in Sweden. The interviews were recorded and transcribed verbatim. Interviews were analysed using an interpretative phenomenological approach.

Findings:

Two themes were identified: need for respectful counselling and needs for guidance and access to contraceptives. The essence "Being in a state of limbo and feeling skeptical" emerged from the themes. The women described a state of limbo, as being caught in an unwanted and emotionally charged situation. They described that respectful counselling and meeting a competent health professional helped them to dispel their skepticism and influenced their plans for contraceptive use after the abortion. Additionally, women who chose an intrauterine device (IUD) reported obstacles in access post abortion.

Conclusion:

The women appear to have a limited receptivity to contraceptive advice when they are unwanted pregnant and skeptical against contraceptives. However, women who experience respect in the counselling, state being helped in contraceptive decision-making, despite an emotionally charged situation and skepticism. To receive respectful counselling and to have good access to IUD appeared as fundamental needs among women in the context of an abortion.

8.5-Teaching and learning methods II

O-8.5.1

Critical thinking in midwifery: A model for practice

Amanda Carter, Debra Creedy, Mary Sidebotham
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Background:

The role of the midwife is distinctive, multidimensional and complex, requiring effective clinical and cognitive skills. Highly developed critical thinking is required to inform evidence based, high quality midwifery professional judgement. Midwifery decision making involves balancing the philosophical and holistic underpinnings of midwifery care, whilst applying contextualised evidence, and honouring the woman's own preferences and choices.

Method:

A program of work aimed to measure and evaluate the development of critical thinking in undergraduate midwifery students. A sequential mixed methods design was used, where the data and results from one study provided a basis and direction for the next study. Six interlinked studies were undertaken. Three tools that measure critical thinking in midwifery practice were developed and psychometrically tested. Results contributed to the development of a conceptual model of critical thinking in midwifery practice.

Findings:

The Critical Thinking in Midwifery Practice conceptual model comprises of four phases, 'explores context', 'reasoned inquiry', 'facilitates shared decision making' and 'evaluation'. The four phases and twelve elements of the model will be presented and discussed in detail. The model provides explicit examples and concepts of critical thinking in midwifery practice and provides a new understanding of this skill.

Conclusion:

The Critical Thinking in Midwifery Practice conceptual model provides new insights into the cognitive thinking processes necessary for safe, evidence-based midwifery practice. These insights aim to promote critical thinking development and assist midwives to navigate and inform complex decision making. Although originally developed for midwifery students, the model could be applied to newly qualified and experienced midwives' practice. The model also provides a framework to guide curriculum design and teaching strategies, and promote discourse about this important cognitive skill by midwifery clinicians, educators and students.

O-8.5.2

50,000 Happy Birthdays - improving the skill and competency of midwives and other healthcare providers to provide high quality maternal and newborn care

Florence West¹, Shantanu Garg², Martha Bokosi²
¹International Confederation of Midwives, THE HAGUE, Netherlands
, Netherlands

Background:

Post-partum haemorrhage and birth asphyxia remain among the leading causes of death for women and their newborn. Significant numbers of women also die from causes related to Pre-eclampsia and Eclampsia and many newborns are born too early to survive without skilled care. Action to prevent unnecessary maternal and newborn deaths from these causes is a priority now more than ever before

Method:

The midwives' competencies will be developed through simulation-based training using anatomical simulators and a low dose, high frequency (LDHF) approach to skill development. The Helping Mothers Survive (HMS) and Helping Babies Survive (HBS) suite of training programs will be used. Training will follow a cascade model, with the training of Master Trainers (MT) occurring first at national or provincial level. These MT will then return to their respective health facilities and educational institutions to conduct facility/institution-based training to build the cohort of MT. Clinical providers, faculty and student champions will also be trained.

Findings:

Up to 20,000 midwives and other healthcare providers will be trained in programs from HMS and HBS. The five selected HMS and HBS modules will be institutionalized into the Midwifery Education Institutions targeted in each

country. The capacity of Midwives Associations in advocacy, leadership, project and financial management, partnerships and networking will be strengthened.

Conclusion:

For every care provider trained in the combination of HMS and HBS training programs, there is a potential for saving more lives on the day of birth. Beyond lives saved this training will also contribute to reducing morbidity and increasing women's satisfaction with their birth experience.

O-8.5.3

The implementation of virtual classroom reflection seminars within the practical placements of a primary qualifying study programme for midwives

Annette Bernloehr, Mirjam Peters, Barbara Beck
University of Applied Sciences, BOCHUM, Germany

Background:

Only since 2009 midwifery training is possible on the basis of an academic course of studies in Germany. Most midwives are still trained at vocational schools in co-operation with one single teaching hospital. In 2010, the first German Bachelor programme for midwifery started at the University of Applied Sciences (hsg) in Bochum. Due to the preliminary legal situation, also university-based programmes require 3,000 hours practical training in addition to 4,380 hours theory. At present, hsg students are allocated to 52 hospitals and 143 freelance midwives for their practical placements, which are at distance from the University. Retaining the learning and reflection process university-based during these practicals requires innovative strategies.

Method:

To support the interlocking of theory and practice, undergraduate students originally had two to three reflection seminars at university per module, depending on the duration of the placement. An addition, e-learning applications were tested for their suitability.

Findings:

As a first measure, one additional group online chat was introduced per module, based on the platform Moodle®. These chats were appreciated by the students, but were ineffective due to the slow and asynchronous communication in writing. Since the Winter Semester 2015-2016, virtual classroom meetings based on the platform Adobe Connect® are implemented in each practical module. A maximum of eight students presents challenging cases they encountered in clinical practice, moderated by a tutor. Module-specific guidelines help them to prepare the cases, starting from physiologic situations in the first semester, up to complex cases at the end of the programme. Currently, web-based trainings are developed to promote asynchronous learning during those study periods.

Conclusion:

Virtual classroom meetings are an effective and innovative method to support critical reflection processes during clinical placements at distance. To use them fully, these meetings need to be planned carefully and initiated during presence periods at University.

O-8.5.4

Introductionprogramme for newly graduated midwives

Mia Marttinen, Susanne Johansson
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Background:

One of the challenges is to be able to attract and maintain newly graduated midwives to labour care, the transition from being a midwifery student to be a professional midwife is a learning and developing process. We wanted to try a different approach to help newly graduated midwives to develop a professional and confident role as midwives through an introductionprogramme with reflectionorientated groupdiscussions, structured introductiondays and practical training. Reflection possibilities in small groups has previously been shown to provide the participants with conceptual tools for reflective learning and to relate critically to professional practice. An structured introductionday is an important part of maintaining confidence in their professions and in their workplace.

Method:

One group with seven newly graduated midwives was created and started an introduction programme. Through reflection, in relation to practical training, and a structured introduction, the midwives are encouraged to find strategies to develop a professional and confidence role.

Findings:

The participants evaluate this programme very helpful for their transition during the first year of practice as a midwife.

Conclusion:

This type of introduction programmes could be a successful strategy to help newly graduated midwives to develop a professional, confident role and stimulate to critical thinking. To get more knowledge, more programmes and research will be needed. A poster presentation during the NJF Congress would give us an chance to discuss this method with other midwives.

Oral Session 9

9.1-Midwifery models of care IV

O-9.1.1

The physiologic length of human gestation among women planning community birth in the United States.

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Background:

The mean length of human pregnancy is commonly accepted to be 280 days, though considerable variation is observed in normal pregnancies, secondary to both maternal characteristics and differences in length of the luteal phase. However, some evidence suggests that the true mean length of gestation may be longer, though this topic is difficult to study given the pervasiveness of labor induction and scheduled cesarean in modern obstetrics.

Method:

Data are from the MANA Stats dataset, which contains n=68,334 midwife-led community births in the US with very low rates of labor intervention. We computed the mean length of uncomplicated, singleton pregnancies, and ascertained which maternal factors contribute to variability in length. Single-factor ANOVA was used to compare average pregnancy length by maternal age group, pre-gravid BMI, race, parity and history of postdates pregnancy. Linear regression was used to determine the effect of these maternal factors on average pregnancy length.

Findings:

The overall mean length of pregnancy in our sample was 281.5 days. This increased from 280.3 days for women with pre-gravid BMI < 18.5 to 283.8 days for those with a pre-gravid BMI ≥ 40. White women had pregnancies an average of 1.61 days longer than women of color. A history of postdates pregnancy elicited the largest increase in subsequent pregnancy length (+4.98 days). Primiparas had pregnancies only 0.81 days longer on average than multiparas. Additional results from survival analyses accounting for competing risks will be presented.

Conclusion:

Our results agree with others that suggest that the 280 day estimate may be slightly short. Individual factors that alter the average length should be taken into account when clinicians are calculating due dates, particularly for those with high BMIs or a history of postdates. Further, the current trend of elective inductions at 39 weeks is not supported by our results.

O-9.1.2

Design and implementation of Enhanced Antenatal Care

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¹University of Iceland, REYKJAVÍK, Iceland

²Iceland

Background:

Obstetric interventions are on the rise. Therefore, a key challenge to modern day maternity care is finding effective ways to emphasize the normality of childbirth in an era of medical technology.

Method:

We designed and implemented a new model of antenatal care, Enhanced Antenatal Care (EAC) which combines elements from one-to-one and group antenatal care to enhance opportunities for a positive dialogue about normal birth within antenatal care. We furthermore designed a quasi-experimental controlled intervention study to compare EAC (n=31) with usual care (n=61) to assess feasibility and the experience of participating. Multiphase data collection involved three surveys, focus groups with women and partners postpartum, maternity records and participant observation. We assessed feasibility by reporting the number of antenatal visits, by participant observation and ongoing assessment with midwives (n=5). The experience of participating in EAC was assessed in focus groups with women (n=10) and partners (n=6), using open-ended questions. The interviews were recorded and analyzed into themes.

Findings:

Group sessions were well attended by women and partners, with few missed sessions. However, the implementation of EAC was challenged by the lack of group space within the clinics. Furthermore, forming groups of four to six nulliparous women was a challenge because of small clinic size. EAC was well received by women and their partners. Women were pleasantly surprised by the groups and reported looking forward to each session. They reported that groups complimented usual care with thorough education in a comfortable setting and that the group discussion furthermore normalized the experience of pregnancy and childbirth. Women described feeling "less alone" in pregnancy after attending groups. Similarly, partners reported that the emphasis on normal birth decreased their anxiety about the upcoming birth. And they described their role as active participants in group sessions, in contrast to the role of observer in one-to-one antenatal care.

Conclusion:

O-9.1.3

Dutch midwives' experience of fear and its impact on clinical decision-making

Emma Van der Weerd, Marie Louise Van der Beek, Hilde Drijfhout, Lisa Marissink, Rebecca Van Dijk, Tamar Nelson, Tessa Schimmel, Maxime Cenin, Davita Van den Heuvel, Elberta Van Randen, Greetje Bangma, Marit Kenter
Amsterdam/Groningen Midwifery Academy, AMSTERDAM, The Netherlands

Background:

International studies have reported fear among practicing midwives: fear of perinatal or maternal mortality, of missing information and causing harm, of obstetric emergencies, of criticism and blame for incidents, and of legal ramifications. The midwife may experience this fear for a multitude of reasons, such as the weight of her responsibility and her position as a care provider, but she may also be susceptible to fear as a result of previous experience with a negative outcome or legal case which may trigger this emotion. Maternity care surrounding pregnancy and birth is changing rapidly in the Netherlands, with increasing emphasis placed on mitigating risks through increased screening, interventions and referrals from midwife-led to obstetrician-led care. Although recent international studies have explored fear in midwifery and the consequences for care provision, this has yet to be investigated in the Dutch context. The aim is therefore to provide insight into how Dutch midwives experience work-related fear and how this impacts clinical decision-making.

Method:

The qualitative study will use semi-structured in-depth interviews. Participants will be recruited from primary care midwifery practices across the Netherlands using maximum variation sampling. The interviews will be conducted by a team of trained midwifery students. The interview questions are open-ended and based on a predefined topic list, with topics based on findings from previous studies. Data collection will continue until data saturation is reached and analysis will be done by means of thematic analysis.

Findings:

Interviews are being conducted from October through December 2018, and as such data collection is ongoing. Outcomes are expected in March 2019.

Conclusion:

Interviews are being conducted from October through December 2018, and as such data collection is ongoing. Outcomes are expected in March 2019.

O-9.1.4

The role of (mis)trust in maternity health care services: An ethnographic study of vulnerable parents' experiences with being offered additional support in the ante - and postnatal period

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Background:

The first years of a child's life has impact on their future health and well-being. Within maternity health care focus is on early intervention to promote social equity in pregnancy. In Denmark, the maternity health care sector aims at offering individualized services to families depending on their needs. Families facing social, medical or psychological challenges are viewed as particularly vulnerable and in need of additional support. The aim of this study was to explore how parents categorized as vulnerable experience the help offered in the ante – and postnatal period.

Method:

The study has a longitudinal ethnographic field design and is conducted in a Danish municipality with urban and rural areas. Twenty women and/or their partner identified as vulnerable have been followed and interviewed throughout the ante – and postnatal period. Additionally, participant observation has been conducted in various health care settings to explore how additional support takes place in practice.

Findings:

Analysis suggests that the unequal power relations between health professionals and families may generate processes of stigmatization. Being identified as vulnerable and offered additional help may create situations of misunderstandings and mistrust. These unintended consequences may produce additional stress and uncertainty as families are afraid to be judged on their parenting skills. For some parents this came down to fear of having their child removed, whereas others associated vulnerability with shame. However, the analysis also suggest that open communication and continuity played an important part in overcoming these initial barriers.

Conclusion:

The empirically grounded results from this study may play an important role in improving the future of individualized maternity health care services. Findings suggest that these services may produce unintended negative consequences for families identified as vulnerable. However, the study also provide knowledge on how to organize services so families feel supported in the best possible way without risking stigmatization.

9.2-Fetal wellbeing

O-9.2.1

Experiences of midwives performing antenatal cardiotocography in a Dutch primary care setting: a qualitative study

Marit Van der Pijl, Corine Verhoeven, Ellen Tiel Groenestege
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Background:

In the Netherlands antenatal cardiotocography (CTG) takes place in the hospital under the responsibility of obstetricians. If an antenatal CTG is indicated a pregnant woman needs to be referred to secondary obstetric led care. In three Dutch regions midwives perform antenatal CTG's in a pilot setting. The aim of this study was to evaluate the experiences of midwives performing antenatal CTG in a primary care setting.

Method:

In this qualitative study, seventeen semi-structured interviews were performed among primary care midwives who perform antenatal CTG's in a pilot setting. The interviews were transcribed, analysed and coded by using the coding process of Grounded Theory.

Findings:

In general, midwives were satisfied with the task-shift, and described benefits for the pregnant women e.g. care provision by a familiar midwife and care closer to home. However, midwives experienced an increased workload as the task was added to the usual activities. On top of that, the execution of CTG was often time consuming due to technical difficulties. Furthermore, midwives had mixed feelings on whether performing antenatal CTG contributes to a more physiological or to a more pathological approach towards normal pregnancy. Many believed that the task-shift contributes to the physiological process: strengthening of their gate-keeper role, increased confidence of

pregnant women and improved midwife-client relationship. In contrast, some midwives believe it contributes to a more pathological process: medicalization and relying too much on technical devices.

Conclusion:

There seems to be a place for antenatal CTG in primary midwifery care as midwives have a positive attitude towards performing antenatal CTG and continuity of care for pregnant women is enhanced. However, the question remains if the antenatal CTG suits the physiological approach of primary care midwives.

O-9.2.2

Mindfetalness- a systematic method for observing fetal movements - A randomized controlled trial

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Background:

Decreased fetal movements are associated with negative pregnancy outcome. Further, low awareness of fetal movements is associated with an increased risk of having a small for gestational age infant. Shortening pre-hospital delay, when a woman has concerns about how her unborn baby moves, may decrease a negative birth outcome. Mindfetalness has been developed as a systematic method for observation of fetal movements and is practiced daily from gestational week 28. The woman is instructed to lay down for 15 minutes, when the baby is awake, and focus on the character, strength and frequency of the fetal movements but not count them. We aimed to examine whether the numbers of stillbirths, or babies born with signs of hypoxia, can be reduced by introducing Mindfetalness into antenatal care. Further, we wanted to investigate whether Mindfetalness increases or decreases the percentage of women seeking care for decreased fetal movements.

Method:

This is a randomized controlled trial, including almost 40 000 pregnant women. The unit of randomization is 63 antenatal clinics in Stockholm, Sweden. Midwives in the maternity clinics randomized to Mindfetalness, gave verbal and written information to pregnant women about how to practice Mindfetalness from gestational week 28. The implementation ran from 01/10/16 to 31/01/18. All information for the analyses was retrieved from the population-based Swedish Pregnancy Register. The primary endpoint is having an Apgar score below seven at five minutes after birth and the secondary endpoint is number of visits to an obstetric clinic due to worry about a decrease in fetal movements.

Findings:

Data analyses are ongoing. Results will be completed in December 2018.

Conclusion:

Data analyses are ongoing. Results and conclusion will be completed in December 2018.

O-9.2.3

Mindfetalness- a useful tool when informing pregnant women about fetal movements

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Background:

Information to pregnant women about fetal movements, and how to monitor them, can be important to pregnancy outcome. Further, raising women's awareness of fetal movements can reduce pre-hospital delay, i.e. a woman waits too long before seeking care if the movements decrease or become weaker. A large randomized controlled trial, including 63 maternity clinics in Stockholm, Sweden, has been undertaken, with the aim to investigate the effects of Mindfetalness - a systematic method for observation of fetal movements. Mindfetalness is practiced daily from gestational week 28. The woman is instructed to observe the fetal movements for 15 minutes, when the baby is awake, and focus on the character, strength and frequency of the movements but not count each movement. The midwives in half of the maternity clinics distributed a brochure with information about Mindfetalness to pregnant women over an 18-month period, midwives in the other clinics did not give information about Mindfetalness. In this sub-study, we aimed to study midwives' experiences of informing pregnant women about Mindfetalness.

Method:

All the midwives at the 32 maternity clinics randomized to give information about Mindfetalness received a web-based questionnaire.

Findings:

115 of 143 (80%) midwives completed the questionnaire. Almost all midwives (99%) thought that the brochure helped them in their daily work when talking about fetal movements, and 94% of the midwives claimed that the women, in general, were positive receiving information about Mindfetalness. The majority of the midwives wanted to continue to distribute information about Mindfetalness in their daily work (always 73%, sometimes 24%).

Conclusion:

Mindfetalness is well accepted by the midwives and they are, in general, positive about distributing the information to pregnant women.

9.3-Pain relief and mode of birth

O-9.3.1

To have an epidural or not to have an epidural is it really all just about that?

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Background:

Pharmacological pain relief such as epidural analgesia, reduces pain, but does not necessarily mean a more positive birth experience. However research is lacking on what predicts positive experience of pain during childbirth.

Method:

The purpose of the study was to identify predictors of women's experience. In Iceland midwives are the primary health care providers during pregnancy and birth. The Caesarean section rate is among the lowest in Europe, approximately 16% and around 4200 women give birth every year. The design was a population-based cross sectional cohort study, with convenient consecutive sampling, stratified according to residency. Pregnant women were recruited through 26 health care centres around the country. They participated by answering postal questionnaires in second trimester and again five to six months after childbirth. A multiple regression analysis was done, with women's experiences of pain in childbirth as the dependent variable.

Findings:

Altogether 725 women participated in the study, with the response rate of 68%. Use of epidural as a pain management was surely strong predictor for positive experience of pain in childbirth, but many other variables were also predictors such as positive attitude to childbirth during pregnancy, experience of duration of birth, and high intensity of pain in childbirth. Support from midwife and having elementary school as highest educational level, were also predictors for the experience of pain. Those predictors is important to address during pregnancy and have in mind during pregnancy and post-partum.

Conclusion:

Health care providers must have in mind, when planning the services through pregnancy, that different variables affect women's experience of pain in childbirth. Furthermore, women have to be aware that other factors than the use of epidural affects their experience of pain in childbirth.

O-9.3.2

Factors influencing decision-making for caesarean section: Views of Irish clinicians

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Background:

There is widespread concern about escalating caesarean section (CS) rates, yet the contributing factors are poorly understood. Therefore, it is difficult for decision-makers to target strategies that could, potentially, halt or reverse the increasing rate. This study aimed to understand clinicians' views of factors influencing decision-making for CS.

Method:

A qualitative design was used. Following ethical approval consenting clinicians (15 midwives; 20 obstetricians) were purposively sampled from three maternity units in the Republic of Ireland, until data saturation was reached. One-to-

one audio-recorded interviews were conducted and transcribed. Data were managed using NVivo® and thematically analysed.

Findings:

Five themes emerged; 'A fear factor', detailing clinicians' fear of adverse outcomes and subsequent litigation; 'Personal preferences versus a threshold – clinician-driven factors', which emphasised their personal beliefs; 'Standardised versus individualised care - a system perspective', explaining the effects of, or lack of, organisational policy; 'Private versus public-a possible difference in practice', explaining how CS rates could be higher in women attending privately; 'Lack of experience or loss of skills and confidence', which resulted in more CSs due to inability to assist vaginal births.

Conclusion:

Findings show that decisions to perform a CS are, on occasion, based on clinicians' personal beliefs and interpretation, similar to findings from other published literature. Maternity care providers, policy-maker and researchers should consider broader issues related to organisational, socio-cultural and political context when seeking solutions to the rising CS rates. The findings will enable clinicians reflect on their day-to-day practice, in order to look for modifiable factors that influence their decision-making, and help women understand the multitude of factors that can lead to a decision to perform a CS. Findings will also contribute to the development of the 'next step action' and assist in devising future intervention studies to reduce any unnecessary caesarean sections.

O-9.3.3

Women's perspectives on the factors that influenced their caesarean section and their involvement in the decision-making

Sunita Panda, Cecily Begley, Deirdre Daly
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Background:

There has been a steady rise in the caesarean section (CS) rates over the past decades with lack of clarity around reasons for this rise. Like many factors, CS in first-time mothers and women's views of their role in the decision to birth by CS is not well researched. This study aimed to understand women's views of factors that influenced, and their involvement in, the decision to perform their CS.

Method:

A qualitative descriptive design was used. Following ethical approval, 20 consenting first-time mothers who had birthed by CS at term gestation were purposively selected from one large maternity unit in the Republic of Ireland. Women were asked to participate in one-to-one audio-recorded interviews, until data saturation was achieved. Interviews were transcribed and data were managed using NVivo® software package, and thematically analysed.

Findings:

Four key themes, each with several subthemes, emerged; 'A timely decision'; 'Taken by surprise'; 'I didn't feel listened to'; and 'A silent acquiescence'. Although some women felt the decision to perform a CS was appropriate and timely for them, many felt it was not what they had expected. Most women 'went with the flow' and accepted the recommendation to birth by CS; however, some were not sure if they played an active role in the process of reaching the decision.

Conclusion:

Women's involvement in the decision-making process for their mode of birth and care can have a significant impact on their birth experiences. The findings of this research are important in helping maternity professionals understand women's crucial role when decisions about optimum mode of birth are being made. Potentially, the findings will help clinicians gain an insight into the feasibility and importance of involving women in decision-making, ultimately making it a positive experience for every woman in their care.

9.4-Lifestyle and fertility

O-9.4.1

Experienced health after dietary changes changes in endometriosis

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Background:

Several studies have shown that persons with endometriosis use complementary methods, but there is a little published data on their effectiveness. It is, therefore, important to investigate, for example, how dietary changes affect persons with endometriosis. The aim of the study was to explore how persons with endometriosis experienced health after dietary changes and what affected the health experience.

Method:

A qualitative study with semi-structured interviews were conducted with twelve persons with endometriosis who had made individual dietary changes. The interviews were performed using an open question and an interview guide, recorded and transcribed verbatim and analyzed using thematic analysis.

Findings:

Four main themes were identified with an overarching theme: To understand and improve individual health. The four main themes were: To make changes for better health, To understand the body, To experience decreasing symptoms and To get support and manage the diet change. The participants experienced an increased health by individual dietary and lifestyle changes, by listening to body's reactions and by experiencing decreased endometriosis symptoms. Support for the diet change helped the participants to implement and sustain the diet change, however, healthcare professionals often did not give support for the dietary changes.

Conclusion:

This study contributes to the limited research available on endometriosis, diet and dietary changes. The participants in the study experienced an improved health after dietary changes with an individually adapted diet that resulted in decreased symptoms and increased energy levels. The dietary changes also led to a deeper understanding of how the participants could affect their health by listening to their body's reactions. The participants in the study felt that they could influence their symptoms through lifestyle changes. This highlights that it is important to give patient-centered care and that healthcare professionals should consider the patient's knowledge, experience and wishes when planning the care.

O-9.4.2

Long-term effects and experiences of lifestyle intervention for pregnant women with BMI over 30

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Background:

Obesity is an increasing health problem and 14% of the women assigned to antenatal care in Sweden 2016 had a body mass index (BMI) ≥ 30 . As the risk of complications during pregnancy and delivery increases with higher BMI and get worsened by high gestational weight gain (GWG), it is important to minimise GWG during pregnancy in this group. A lifestyle intervention for pregnant women with a BMI ≥ 30 was performed in the western part of Sweden between 2011 and 2013. Midwives assisted by dieticians provided regular counselling and customised advice about physical activity and nutrition throughout each pregnancy. This study is a follow-on to an initial intervention study, and was carried out two and a half years after the intervention. The initial study was successfully evaluated and provided the foundation for new care guidelines for overweight pregnant women. The purpose of this presentation was to describe whether a lifestyle intervention at the primary care level had an effect on the women's or their children's weight 2.5 years after childbirth. A secondary aim was to describe the women's experiences of the intervention.

Method:

A case control study of the women with a BMI ≥ 30 in early pregnancy, where the women in the intervention, who had fully managed to follow the programme (n= 81) formed the case group. They received a survey and answered questions about their own weight and their children's weight and height, 2.5 years after childbirth. The same procedure was carried out in the control group which consisted of women with obesity (n=78) who had received standard care during pregnancy.

Findings:

Findings and Conclusion

Preliminary findings show that the intervention was beneficial. A detailed view of the findings will be presented at the conference, including weight outcomes and the participating women's experiences of the intervention.

Conclusion:

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O-9.4.3

Biological Parents - Technological Pregnancy

Linda Holmberg

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Background:

This case study investigates the phenomenon of transnational surrogacy from the perspective of the intended biological parents. Transnational surrogacy is illegal in Denmark, however, the development of reproductive technologies, the internet, and ease of international mobility has led more infertile Danish couples abroad to achieve their longing for a biological child.

The empirical material was collected in Denmark from three heterosexual couples, who, between 2015-2016, had children with transnational surrogacy in the Ukraine and the USA.

Method:

The theoretical foundation for this study

is a body-phenomenological perspective, with a narrative angle at collection data.

The empirical material was collected in Denmark from a case study around three heterosexual couples, who, between 2015-2016, had children with the help of transnational surrogacy in the Ukraine and the USA.

Findings:

The study focuses on the narratives that are created by the intended parents during gestational pregnancy; the period between deciding to use a surrogate to they receive their child. It studies how the perception of the body influences the narratives the intended parents develops, and the role of technology in that narrative. The most surprisingly finding was, that the intended parents was longing to have a midwife on their side, to guide them towards their surrogacy pregnancy, to tell them about the physically and mentally changes in the life of themselves but also their surrogate mother.

Conclusion:

The study concludes that the intended parent's immense longing to have a child, makes them blind to the fact that they are knowingly breaking Danish law. At the same time, the thesis finds that the intended parents lack a trained professional to support them during this process and they expresses a need for a midwife on their side, to guide them through the process, not legally, but emotionally and in the way of building parenthood during pregnancy.

Poster session

P01

Diabetes Mellitus And Lower Genital Tract Tears After Vaginal Birth: A Cohort Study

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Background:

Diabetes Mellitus in pregnancy is increasing. No existing studies have examined Diabetes Mellitus as the primary exposure for lower genital tract tears after vaginal birth. The objective was to study the association between Diabetes Mellitus (all types combined), Type 1 Diabetes Mellitus, Type 2 Diabetes Mellitus and Gestational Diabetes Mellitus and lower genital tract tears after vaginal birth.

Method:

A register-based descriptive historical cohort study of women with near-term ($\geq 35+0$ weeks) and term vaginal births ($n = 31.297$) at Aarhus University Hospital, Denmark from 1 January 2004 to 31 December 2012. The associations between Diabetes Mellitus and lower genital tract tears were analyzed using multiple logistic regression analyses.

Findings:

Approximately 32.000 women were eligible for the study; 796 women had diabetes (2.5 %) and 1.318 experienced an obstetric anal sphincter injury (4.3 %). The overall risk of lower genital tract tears was similar among women with a diagnosis of diabetes (Type1 Diabetes Mellitus, Type 2 Diabetes Mellitus, and Gestational Diabetes Mellitus) compared to women without diabetes, except for nulliparous women with Type1 Diabetes Mellitus. Nulliparous with Type 1 Diabetes Mellitus experienced a higher risk of episiotomies (16.9 % vs. 8.7 %, $p < 0.031$), crude and adjusted odds ratios (OR 2.13, 95 % CI 1.14-3.97) and (OR 2.48, 95 % CI 1.21-5.10), respectively.

Conclusion:

Women with Diabetes without a previous cesarean delivery who gave birth vaginally did not experienced an increased risk of lower genital tract tears, including obstetric anal sphincter injuries.

P02

Epidural analgesia in first time mothers in relation to country of birth and migration to Norway

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Background:

With growing levels of international migration, inequity in care is an increasingly important subject, and access to pain relief can be one indicator of equitable care. The decision to use epidural analgesia during labor is influenced by the woman's need of pain relief, but also by other factors like insufficient communication, lack of knowledge or midwives' attitudes.

Aim: To investigate the associations between maternal country of birth and other migration related factors (reason for migration, paternal country of birth, length of residence), and the use of epidural analgesia in nulliparous women in Norway.

Method:

This population-based study included data on first-generation nulliparous migrant women ($n = 69\,564$) and non-migrant women ($n = 399\,881$), in Norway between 1990 and 2013, using data retrieved from the Medical Birth Registry of Norway and Statistics Norway. Odds ratios (ORs) with 95% confidence intervals (CIs) were estimated using logistic regression, adjusted for year of birth, size of hospital, health region, age, marital status, income and education. The main outcome measure was epidural analgesia for labour pain.

Findings:

The prevalence in use of epidural varied (non-migrant women 31%; migrant women 24-47%). Compared with non-migrants, the odds for receiving epidural analgesia was lowest in women from Vietnam (aOR 0.54; 95% CI 0.50-0.59) and Somalia (aOR 0.63; 95% CI 0.58-0.68), and highest in women from Iran (aOR 1.32; 95% CI 1.19-1.46) and India (aOR 1.19; 95% CI 1.06-1.33). Being a refugee was associated with lower odds (aOR 0.83; 95% CI 0.79-0.87) and being a migrant with a non-migrant partner was associated with higher odds (aOR 1.14; 95% CI 1.11-1.17). The odds for epidural analgesia increased with length of stay in Norway; ≥ 10 years stay; (aOR 1.06; 95% CI 1.02-1.10).

Conclusion:

The use of epidural analgesia varied between different sub-groups of migrant women.

P03

Bridging the gap - film based SRHR information targeting migrant women

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Background:

Research has shown that women with migrant background have poorer access to sexual and reproductive healthcare than people born in Sweden. At the same time the need for adapted information within this group is big. Issues related to sexuality are rarely addressed within the healthcare system due to language barriers, taboos and unwillingness to talk about sexuality. The obstacles may lie with the professionals or the target group. There are large migrant groups in Sweden who have difficulties accessing information and knowledge, mainly because of language barriers. These women also have a greater social vulnerability and poorer knowledge of the healthcare system.

Method:

The Swedish Association for Sexuality Education (RFSU) has produced 11 films in 14 languages. The material has been developed in close cooperation with professionals such as midwives and gynaecologists, as well as the target group itself. The films are available at rfsu.se/upos

Findings:

The purpose of the films is to facilitate the meeting between the healthcare professional and the patients in order to improve their sexual and reproductive health. The films provide basic information on abortion, pregnancy, childbirth, STI's, pain during intercourse, genital mutilation, lust and pleasure, menstruation, the vaginal corona, birth control and the female genitalia.

Conclusion:

Women with migrant background need more information concerning sexual and reproductive health and sexual and reproductive rights in their own language. RFSU has therefore provided these films as a bridge between the target group and the healthcare system. The method strengthens women and increases their health. It also has a positive effect on integration and bridges the health gap between women born in Sweden and those of migrant background. The films have been well received by healthcare professionals in Sweden and have also been requested from other Nordic countries.

P04

Health professionals' experiences and views on obstetric ultrasound in Vietnam: a regional, cross-sectional study

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Background:

Obstetric ultrasound is an important part of antenatal care in Vietnam, although there are great differences in access to antenatal care and ultrasound services across the country. The aim of this study was to explore Vietnamese health professionals' experiences and views of obstetric ultrasound in relation to clinical management, resources and skills.

Method:

In April 2017, a cross-sectional study was performed in the Hanoi region, Vietnam, through a questionnaire including questions and preformed statements. Participants were obstetricians/gynecologists (n=289), sonographers (n=58) and midwives (n=535).

Findings:

A majority (87%) of participants agreed that "every woman should undergo ultrasound examination". Access to ultrasound at participants' workplace was reported as good regardless of health facility level. Most participants reported high skills for fetal heart rate examination (70%-84%) whereas few (22%-38%) reported being skilled in examination of the anatomy of the fetal heart. Lack of ultrasound training leading to suboptimal pregnancy management was reported by 37% of all participants. "Better quality of ultrasound machines", "more physicians trained in ultrasound" and "more training for health professionals currently performing ultrasound" were reported to improve the utilisation of ultrasound.

Conclusion:

Obstetric ultrasound is used as an integral part of antenatal care at all health facility levels in the region of Hanoi, and access was reported as high. However, reports of lack of ultrasound training resulting in suboptimal pregnancy management indicates a need for additional training of ultrasound operators to improve utilisation of ultrasound. In addition, issuing medical guidelines stating clear indications for ultrasound surveillance during pregnancy may contribute to adequate allocation of available resources within the health care system.

P05

Relationships really do save lives: How a MOOC can contribute to transforming maternity care to align with the evidence

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Background:

The Lancet series on midwifery provides powerful evidence detailing how to develop and deliver maternity care to optimise outcomes for women and babies. Easy access to this information and guidance on implementation is

essential if we want to see large-scale implementation of evidence-based primary maternity models. This presentation will describe the development, delivery and evaluation of an innovative Massive Open-access Online Course (MOOC) designed to contribute to the transformation of practice globally.

Method:

Description:

The MOOC platform provides a valuable opportunity to reach a broad audience and disseminate evidence and application to practice. While many MOOCs are developed to attract learners to a host university for further study, the Midwifery@Griffith team wanted to use the MOOC as a platform to reach a global audience committed to reform of maternity services. Built around the concept of integrality and implementation of the Lancet framework for quality maternal and newborn care, the MOOC was developed with direct input from international leaders in maternity services reform.

The MOOC offered on the Future Learn platform ran for the first time in November 2017 and attracted >3000 learners from 136 countries. It will be offered again in 2018.

This presentation will discuss the development, dissemination and evaluation of the MOOC

Findings:

Impact:

We will present data demonstrating impact on practice using feedback from learners and organisations. Opportunities to develop collaborations with members from the Lancet team, JHPIEGO, WHO, WRA and others came through strengthened relationships and a shared clarity of purpose in building the MOOC concepts. Importantly, we will also describe the learnings from within the development team.

Conclusion:

This presentation shows how teams can use their existing relationships and resources to extend their influence. Using a clearly defined design process and a collaborative participatory approach are key factors to success.

P06

A virtual reality delivery ward

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Background:

Studies have found a correlation between the experience of a gap in relationship between theory and practice, and dropping out of a study programme. Especially the transition between the theoretical and the clinical part of training seems to be challenging. Students who drop out of the midwifery program do not experience coherence between expectations of becoming a midwife and their actual experiences in the clinic. The hypothesis is that using an e-learning program in the form of a "Point Of View" virtual world can help midwifery students to a better understanding of the clinical work and thereby improve the coherence between theory and practice.

Method:

We collected qualitative data from midwife students and midwife teachers. The data were used to make a guideline for the development of an e-learning program that introduces the student to midwifery practice and focuses on the transitions between theory and practice. A collaboration with "The Unit of E-learning Copenhagen" and the Midwifery Programme was initiated to form a mock-up that aims to show the virtual model of a delivery ward and make it possible for the students to perform clinical practices in a virtual reality world.

Findings:

At submission stage the final e-learning program is under development. Preliminary findings indicate a need for more specified teaching methods that focus on the transitions between theory and practice. The test of the mock-up showed the need for introduction of virtual clinical skills to be supported by evidence-based theoretical knowledge, to help the students achieve knowledge of evidence based clinical practice. Design improvements were also collected.

Conclusion:

The use of an e-learning program in the form of a "Point Of View" virtual world can help midwifery students to better understand the clinical work and be able to make a link between the theoretical and clinical part of the midwifery programme.

P07

Antenatal care needs of clients during a pregnancy after Assisted Reproductive Technologies - a mixed methods literature review

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Background:

Assisted Reproductive Technologies (ART) make new routes to possible parenthood for subfertile women and men. Nearly five percent of newborns are nowadays born following ART, a steadily increasing number. ART-pregnancies are associated with higher risks of complications, such as small for gestational age, preterm birth, low birth weight, perinatal death and delivery complications. Next to the medical impact, the ART-pregnancy can have psychological impact for the ART-clients, such as high levels of anxiety in pregnancy and perception of the pregnancy as being risky.

There is a lack of awareness of and training for midwives and other maternity care providers regarding the impact of ART on the pregnancy. The aim of this study is to summarise existing literature investigating the antenatal maternity care needs of ART-clients in the transition from fertility treatment to parenthood.

Method:

By means of a mixed methods literature review -guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist- we systematically searched for literature to identify journal articles published from January 1995 through March 2018 in four databases: PsycINFO, Pubmed, CINAHL and Cochrane. The following MeSH terms were used: Pregnancy, ART, IVF, psychosocial, mental, support, patient needs. After evaluating 458 abstracts, 31 eligible studies were assessed for methodological quality.

Findings:

Eleven studies matched the inclusion criteria and were used for analysis. Preliminary results indicate that ART clients seem to be anxious during pregnancy and may have needs for more checks, ultrasounds and psychosocial support.

Conclusion:

A mixed methods literature review provided a complete overview of the available high quality literature. The number of ART-pregnancies is mounting, placing additional and changed demands on the competence and knowledge of maternity care professionals. The results of this review can provide starting points for policy makers and professionals to better meet the needs of ART clients.

P08

Fear of birth: Prevalence, counselling and method of birth at five obstetrical units in Norway

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Background:

There is increasing evidence that fear of birth can have long-term effects on the childbearing woman and the method of birth. Little is known about the prevalence of fear of birth, the content of counselling to women with fear of birth and how it influences the mode of birth among different hospitals in Norway.

The aim of this study was to examine differences between five hospitals in Norway in the occurrence of fear of birth, counselling offered and method of birth.

Method:

The source data in this study was from the Norwegian cohort of the Bidens study and retrieved through a questionnaire and electronic patient records from five different obstetrical units in Oslo, Drammen, Tromsø, Ålesund and Trondheim, which included 2145 women. The Wijma Delivery Expectancy Questionnaire measured fear of birth, and a cut-off of ≥ 85 was used to defined fear of birth.

Findings:

In total, 12% of the women reported fear of birth, with no significant differences between the different units. A total of 8.7% received counselling according to hospital obstetrical records, varying significantly from 5.7% in Drammen to 12.7% in Oslo. Only 24.9% of the women with fear of birth had counselling at their hospital. All the units provided counselling for women with fear of birth, but the content varied. Overarching aims included helping women develop coping strategies like writing a birth plan and clearing up issues regarding prior births. A secondary objective was to

prevent unnecessary caesarean section. Both primi- and multiparous women who reported fear of birth had a twofold increased risk of a planned caesarean section.

Conclusion:

There were no differences between five Norwegian hospitals regarding the occurrence of FOB. Counselling methods, resources, level of commitment, and the number of women who received counselling varied; thus, hospital practices differed.

P09

Internationalization in midwifery education - what's in it?

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Background:

In the revised Curricula of the Danish Professional Bachelor's Degree Programmes, education towards a globalised market is one of the elements. International and intercultural competencies are sought, cultural understanding and communication in different contexts are central learning outcomes and this also applies to the midwifery education. The education is organised to give opportunities to students to undertake parts of their education abroad. During the past three to four years most 50% of midwifery students at University College of Northern Denmark (UCN) participated in such exchange programmes.

Method:

We attempt to inspire others with interest in internationalisation of the midwifery education through sharing experiences.

Statements from women receiving, travel letters and videos, students' evaluations and an article published in the Danish "Tidsskrift for Jordemødre" (2016) are used to illustrate the issues involved in preparing the students, the exchanging university colleges and the clinical wards for the exchange.

Findings:

Women receiving care from an international student do not respond differently towards the international students than towards the Danish students. The exchange students find that they, through reflections on differences of care in pregnancy, childbirth and maternity between their own and other countries, have achieved an increased competence in practicing individualized midwifery care. An increased awareness of the importance of a supportive study environment is usually also addressed. Both the theoretical and the clinical education have been engaged in professional discussions where known practice is mirrored against foreign practice resulting in inspiration on both sides.

Conclusion:

It is considered to be valuable to organize the Midwifery Education containing possibilities of acquiring intercultural competences. By acquiring such competences students feel equipped to provide individual care regardless of ethnicity.

Likewise the importance of well prepared and well organized framework in both theoretical and clinical education is emphasized.

P10

Midwife's role-realization through their own maternity experience.

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, Estonia

Background:

The aim of the research was to find out how midwives personal maternity experience influences their work and professional attitude. The methodology of the research is empirical and quantitative, including the appraisals and opinions of 127 midwives. With permission from the board of the Estonian Midwifery Association, the survey was carried out at the association conference on 04.05.2017.

Method:

For the calculations of the general results, the usable amount was 127. In order to gather information, the authors created an original survey based on Chris Bewley's thesis called "Midwives experiences of personal pregnancy related loss". The clearness of the survey was insured through a pilot study that was carried out at the Tartu

University Clinicum maternity department. There were 10 trivial questions in the survey, which were followed by two 10-statement scales for midwives with and without personal maternity experience.

Findings:

Out of all the midwives taking part in the conference (n=154), the survey was answered by 128 (83,1%).

It also turned out, that a lot of midwives without a personal maternity experience, agreed to an extent that a maternity experience influences their professional work. In addition, the results of the research revealed that a personal maternity experience as a factor in professional work is also influenced by the length of service and the age of the midwife. From the research it turned out that there was no difference in the field of work of the midwives.

Conclusion:

The research clearly showed that the midwives personal maternity experience has an influence over their work and professional attitude. To a large extent, this claim was agreed upon by midwives who held a personal maternity experience or had been pregnant during their time of work.

P11

Intrauterine instillation of Mepivacaine for pain relief at insertion of intrauterine devices: A double-blind randomized controlled trial

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Background:

To evaluate whether intrauterine mepivacaine instillation before intrauterine device (IUD) insertion decreases pain compared to placebo.

Method:

We performed a double-blind, randomized, controlled trial comparing mepivacaine 1%, 10 ml versus 0.9% NaCl intrauterine instillation using a hydrosography catheter 5 min before IUD insertion in women 18 years of age or older. Participants completed a series of 10 cm visual analogue scales (VAS) to report pain during the procedure. The primary outcome was the difference in VAS scores with IUD insertion between intervention group and placebo. Secondary outcomes included VAS before and after insertion and analgesia method acceptability.

Findings:

We randomized 86 women in a 1:1 ratio; both groups had similar baseline characteristics. In the intention to treat analysis, the primary outcome, median VAS with IUD insertion was 4.8 cm in the intervention group (n=41, IQR=3.1–5.8) and 5.9 cm in the placebo group (n=40, IQR=3.3–7.5, p=.062). In the per protocol analysis, the median VAS with IUD insertion was 4.8 cm (IQR=3.1–5.5) and 6.0 cm (IQR=3.4–7.6) for the intervention and placebo groups respectively (p=.033). More women in the intervention group reported the procedure as easier than expected (n=26, 63.4% vs. n=15, 37.5%) and fewer reported it as worse than expected (n=3, 7.3% vs. n=14, 35%, p=.006).

Conclusion:

Intrauterine mepivacaine instillation before IUD insertion modestly reduces pain, but the effect size may be clinically significant.

Implications statement.

While the reduction in VAS pain scores did not meet our a priori difference of 1.3 points for clinical significance, participants

P12

MIDWIFERY GROUP PRACTICE MODEL CREATES BENEFITS BEYOND THE RELATION

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Background:

The Delivery Ward at Aarhus University Hospital, Denmark had 5007 deliveries in 2016. 120 midwives offer a Standard Care Model (SCM) including antenatal visits, deliveries and a short postnatal care period. Primiparous stay in hospital 2 days after delivery, multiparous go home 4-6 hours after delivery.

The women in SCM are offered:

5 antenatal visits with any midwife at the Prenatal Clinic.

Any of the midwives on duty, in shifts, at their delivery.

1 visit on the 3rd day postpartum with any midwife at the Postnatal Clinic.

Midwifery Group Practice Model (MGPM):

12 midwives working in 4 teams. Caring for 500 women per year, including 120 vulnerable women and all women planning for homebirth.

Offer Continuity of Care by a known team midwife throughout pregnancy, delivery and 2-3 days postpartum.

Including 5 antenatal visits, delivery and 1 visit postpartum.

Team midwives are primary caregivers in 84% of the deliveries.

Method:

Collecting and comparing empirical raw data from Aarhus University Hospital in 2016.

Results are not based on scientific evidence or statistic significance.

Findings:

The number of planned homebirths has increased significantly since 2012 from 0.6% to 3.17% in 2017.

The number of augmented deliveries, epidurals and acute c-sections has decreased in MGPM compared with SCM.

Conclusion:

The midwives in MGPM have much greater satisfaction working.

The women express increasing satisfaction in their evaluations.

Less interventions shows normalization of birth for a large number of women.

The fact that the homebirth rate is increasing shows that MGPM offer the support women need in order to choose birthplace.

MGPM creates strong relationships between midwife and woman which create safety and satisfaction.

Giving women the choice of Continuity of Care provides benefits far beyond the birth of their child.

MGPM needs to be studied more for short and long term benefits.

P13

Using the Internet as source of information during pregnancy - a descriptive cross-sectional study among fathers-to-be in Sweden

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Background:

Today, prospective parents are actively involved and seek information on websites on the Internet. On the one hand, Internet use during pregnancy offers opportunity to get access to information quickly and easily as well as to share apprehensions and doubts with others. On the other hand, information can be confusing, overwhelming and makes it difficult for prospective parents to judge if information is trustworthy.

Method:

A descriptive cross-sectional study was conducted. Data were collected through a questionnaire and distributed at a maternity clinic in south of Sweden. Ninety-two fathers participated in the study, and the response rate was 98.9%.

Findings:

Of all the fathers-to-be, 76% sought pregnancy-related information on the Internet. One sought information on a daily basis, 40.6% every week and 58% every month or more rarely. The fathers-to-be who participated at all/most visits at antenatal care searched for information on the Internet more often than those who only attended few/no visits ($p=0.012$). A total of 33.4% fathers-to-be had been recommended a webpage by the midwife at the antenatal care. The main reason for using the Internet was to find information about pregnancy related subjects and read about people in similar situations. More than half of the fathers-to-be (61.8%) had at some point been worried by something they read on line.

Conclusion:

The majority of all fathers-to-be searched for information on the Internet, and more than half of the fathers were, at some point, worried about the information they read. One way to address questions and concerns could be to ask and discuss with the midwives what they read so that the midwives can recommend appropriate and credible websites. To achieve this, there must be opportunities for midwives to gain knowledge on how best to use the Internet as a tool.

P14

Incidences of obstetric outcomes and sample size calculations

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Background:

In high-income countries, many obstetric events occur rarely. This presents challenges when trying to demonstrate effects of new interventions.

The objective of the study was to report incidences of relevant obstetric events and to calculate sample sizes in tentative studies using some rare- and a more common obstetric outcome.

Method:

We included all term, singleton, intended vaginal deliveries in Denmark from 2008 to 2015 (N=381,567) retrieved from the Danish Medical Birth Register. We calculated sample sizes necessary for tentative studies to be able to detect risk reductions of 25% and 50% at the 5% level with power 80% and 90%, respectively.

Findings:

The incidence of neonatal mortality, Apgar score <7/5 and emergency caesarean section in the study population was 0.05%, 0.58% and 10.5%, respectively. Tentative RCTs with outcomes of low incidences required very large sample sizes to achieve adequate power to detect a statistically significant risk reduction of either 25% or 50%. In tentative cohort studies, the sample size required was smaller but still large in the case of rare outcomes. Our sample size calculations showed that the primary contributor to the required sample size, besides the outcome incidence, was the change from 50% to 25% in the risk reduction.

Conclusion:

The incidence of outcome measures affects the sample size. Relevant obstetric outcomes occur rarely, thus large sample sizes are required to gain statistical power. This entails a risk of studies being underpowered or only showing an effect on common outcomes when potentially also having an effect on rare outcomes. Multicentre studies, international collaborations or alternative study designs to RCTs could be considered.

P15

A caseload midwifery model for women with fear of birth, women's and midwives' experiences: a qualitative study

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Background:

Fear of birth is common during pregnancy and birth and is related to a higher risk of obstetric complications and psychological distress. There is no consensus of how to handle fear of birth in clinical care. Midwifery continuity of care models has a strong evidence of being beneficial for women and birth outcome. However, midwife continuity through pregnancy, birth and postnatal care is rare in Sweden. Women with fear of birth could benefit from such care. This study considers women's and midwives' views and experiences of attending a midwifery continuity of care model.

Method:

Participants were recruited from a pilot study where women assessed with fear of birth received antenatal and intrapartum care from a known midwife. Eight women and four midwives were interviewed and data was analyzed using thematic analysis.

Findings:

An overarching theme; 'A mutual relationship instilled a sense of peace and security', and four themes; 'Closeness, continuity and trust', 'Preparation and counselling', 'To know one another made a difference' and 'Security, confidence and a lessened fear' reflects views and experiences of both women with fear of birth and their midwives, after attending a caseload midwifery model of care.

Conclusion:

The current caseload midwifery model investigated in this pilot study was experienced by both women and midwives as a model that generated a trustful relationship. This, in turn, increased women's confidence and reduced their fear. The midwives experienced that they were better equipped to address women's needs and the way of working became more holistic.

P16

Labour pain - Construction of pain within the midwife profession

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Background:

Problem and Background: The background for this thesis was an interest in the social characteristics of labour pain, in reference to how the Danish midwife profession views labour pain and how this view influence the care Danish midwives offer labouring women in pain. Through a systematic search for literature it was found that there was a lack of literature on this subject.

Method:

Research Question: How does the midwife education teach midwives to care for labouring women in pain on the grounds of a particular professional view on labour pain, and what implications does this have on the way that the midwives care for labouring woman in pain?

Methods: An ethnographic inspired field study through 7 years, and semi-structured interviews, were conducted on the basis of a combined hermeneutic and phenomenological approach. 6 midwives and midwife students were interviewed. The analysis was guided by an adapted theory approach that included the theoretical concepts of *emotion work*, *negotiated social order*, *profession identity* and *professional care*.

Findings:

The particular professional view on labour pain was identified as the midwives viewing labour pain as a meaningful pain with a purpose. Midwife students were taught this through the theoretical – and practical educations through the mentorship system, where they learn to act in accordance with the labour wards feeling rules through surface acting and deep acting.

Conclusion:

Midwives are reluctant to use pharmacological pain relief in labour. They utilize the use of negotiation to encourage the labouring woman in pain to handle the labour pain without pharmacological pain relief. If the midwife does not succeed in convincing the labouring woman that the labour pain is meaningful, then both midwife and labouring woman might feel powerless when dealing with the labour pain.

P17

Prevalence and predictors of maternal smoking prior to and during pregnancy in a Danish population: A cross-sectional study

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Background:

Maternal smoking is a major public health problem posing the risk of several negative health outcomes during pregnancy and for infants of smokers, although the prevalence of maternal smoking has continuously decreased since the 1980s. Since 2005, no study has described the prevalence of smoking in a Danish population. Studies are needed to estimate the prevalence of smoking, and identify women at risk of smoking during pregnancy, and to target future interventions for smoking cessation. The aim of this study was to estimate the prevalence and potential predictors of maternal smoking at the time of conception and at 20 weeks of gestation in a Danish population.

Method:

A cross-sectional study was conducted among pregnant women receiving antenatal care at the Department of Obstetrics, Zealand University Hospital, Denmark from August 2015 to March 2016 (n=566). The main outcome was smoking at the time of conception and at 20 weeks of gestation. The questionnaire also collected information about maternal, health-related and sociodemographic characteristics. Descriptive analysis was conducted, and multivariate logistic regression analysis was used to assess the potential associated predictors (adjusted odds ratio).

Findings:

The prevalence of self-reported smoking at the time of conception was 16% (n=90) and 6% smoked at 20 weeks of gestation (n=35). Multiple logistic regression analysis showed that statistically significant predictors for smoking at conception and at 20 weeks of gestation were the socioeconomic factors; ≤12 years of education, shift work and being unemployed.

Conclusion:

The prevalence of self-reported maternal smoking is lower than seen in the previous study from 2005. However, predictors for smoking at the time of conception and at 20 weeks remain to be low socioeconomic status indicating a social inequality in maternal smoking. Women at risk of smoking during pregnancy must be identified early and be offered interventions to help them quit smoking.

P18**International Health Days for midwifery students - A concept for 'internationalisation at home'?**

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Background:

The "Hochschule für Gesundheit" (University of Applied Sciences (hsg)) offers a direct-entry Bachelor programme for midwives. In the 4th semester, the students have the possibility to go abroad for enhancing their language skills and their cultural competencies for nine weeks [1]. Only 10%-15% of the students take advantage of this offer, although internationalisation of health professions is an important topic due to general migration and free movement in the EU. This leads to the question, whether an event, that offers an intercultural exchange with international experts can be a chance for a process of "internationalisation at home" for students, who cannot travel on their own [2].

Method:

The process of initialisation, conceptualisation, implementation and evaluation of the event called "International Health Days" was realised by an interdisciplinary planning group including the international office, students, professors and research assistants of the university.

Findings:

The international event was called "From theory to practise" and brought nursing-, midwifery-and Public Health students, lecturers and experts from Belgium, UK, Sweden, Finland, Austria and Germany together. Beneath listening to presentations, the students worked in groups and discussed the health care systems of different countries and the collaborate work of various disciplines. The evaluation pointed out, that the students acquired new language skills, a broader understanding of cultural differences and inspirations about combining theory and practice internationally. Furthermore the event supported the professional staff to establish international cooperations between different universities.

Conclusion:

The implementation of the "International Health Days" has gained an additional benefit for the students as well as for the lecturers and experts. Further research is required to evaluate the chances, demands and limitations of "internationalisation at home" for midwifery students.

P19**Like an empowering micro-home: a qualitative study of women's experience of giving birth in water**

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², Sweden

Background:

Waterbirth is used in hundred countries but have been unusual in Sweden the last two decades. Previous qualitative studies of waterbirth are scarce and include a few respondents.

Method:

A qualitative study with in-depth interviews three to five months after the birth were conducted and content analysis of the interviews was made. Participants were 20 women, 12 primiparas and 8 multiparas, who gave birth at a city-located hospital in Stockholm, offering waterbirth to low risk women.

Findings:

The overall theme emerging from the analysis was, "Like an empowering micro-home", which describes the effect of being strengthened, enabled and authorized in the birth process. Three categories were found: Synergy between body and mind, Privacy and discretion, and Natural and pleasant.

Conclusion:

The immersing in warm water equipped the women with conditions that helped them to cope and feel confident during labour and birth. The homelike and limited space of a bathtub helped give a relaxed feeling of privacy, safety and focus for the women. Implications for practice: This study contributes to a deeper understanding of what waterbirth offers to women. For some women, waterbirth may be a way to accomplish an empowering and positive birth experience, and could work as a tool that preserves the normality of, and increases self-efficacy in, childbirth.

P20

Home care midwifery postpartum implementation and evaluation of the care

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Background:

Since the implementation of the program *home care midwifery postpartum* number of families taken care of by home care midwives has steadily grown. Clinical guidelines were first released for the program in 2009 and has been regularly revised, becoming more flexible giving a broader group an access to the care.

Method:

Three evaluation studies have been conducted in order to evaluate the program, the first study in 2003, a comparative correlational study; 2010 a study based on midwives data registration on various aspects and scope of the service and in 2013 a reevaluation of the program. In both the first and the 3rd study the same instruments were used, a questionnaire designed by the author based on Carty's and Hodnett's questionnaires, 5-point Likert scales measuring mothers perception of provided care regarding informational support (11 items), satisfaction of care (16 items) and their attitude towards the content of service provided (24 items).

Findings:

According to the results of the first and second study mothers receiving home care had more positive perception of care than mothers staying for a longer time at the hospital ($P < 0.01$). Results of the second study showed that number of visits ranged from 1 to 11, average of 6.71 visits with an average duration of 54 minutes per visit. Primiparous women were getting significantly more and longer visits compared to multiparous ($P < 0.001$, $P < 0.05$). About 50-60% of the home midwifery care was provided outside the regular daytime hours.

Conclusion:

According to the two evaluation studies (2003, 2013) significant difference by all the three scales showed more satisfaction and more positive attitudes towards the home midwifery program compared to the care received at the hospital ($P < 0.001$). In accordance to the results of the second study (2010) the home midwifery care postpartum was characterized by high flexibility, accountability and professional care.

P21

Working with language mediators in the obstetric care for women of migration or refugee background

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Background:

In Germany, nearly 40% of all young children have mothers with a migration or refugee background (1). The mothers access to standard health care is often impeded by a lack of German language skills (2). In the peripartum period, health professionals are supported by professional language and integration mediators in communicating with the women. However, the potential of the work done by the language mediators can only be used to a limited extent due to a lack of specialist knowledge. Conversely, midwives and doctors are often not experienced working with language mediators and are not aware of the specific nature of this way of communication.

Method:

The poster depicts a project to promote the obstetric care for migrants with language problems. The aim of the described project is the qualification of language mediators in peripartum themes and to train midwifery students in cooperating with language mediators. The students' intercultural and interprofessional competences are promoted. The university develops a curriculum tailored to the language mediators and takes over their training. Subsequently, the midwifery students and language mediators jointly accompany pregnant migrants or refugees with language problems. Within interprofessional care conferences, language mediators and midwifery students present and reflect their experiences together. The project is funded by the Federal Office for Migration and Refugees (BAMF) (term July 2018-July 2020).

Findings:

The project will show whether language and integration mediators with professional background knowledge increase the integration of childbearing women with limited language skills into the health care system. A nationwide supply of comparable services in major German cities can also positively influence other integration sectors.

Conclusion:

Language barriers are, in the face of increased migration, a growing challenge within obstetric context and for the education of midwives. Concepts including adapted training contents should be implemented comprehensively (3).

P22**Suffering among pregnant women with a history of violence- help seeking and police reporting.**

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Background:

Pregnancy is a period in women's lives when many women experience increased stress and feels vulnerable. Also, a period when many women experience violence, mainly in the home and from their intimate partner. According to the Swedish penal code, domestic violence is a criminal act. The aim was to explore the degree of self-reported suffering following violent incidents and the prevalence of police reporting and other help-seeking behaviour among women in early pregnancy that have experience of a history of violence.

Method:

A cross sectional design. 1939 pregnant women ≥ 18 years were recruited prospectively between March 2012 and September 2013. Of those 761 (39.5 %) reported having a history of violence and that dataset comprises the cohort investigated in the present study. Descriptive statistics, Chi-square analysis and T-test were used for the statistical calculations.

Findings:

Results: More than four of five women (80.5 %) having a history of emotional abuse ($n = 374$), more than half (52.4 %) having history of physical abuse ($n = 561$) and almost three of four (70.6%) who experienced sexual abuse ($n = 302$) reported in the early second trimester of their pregnancy that they still suffered from their experience. Of those women who had experienced emotional-, physical- and sexual abuse, 10.5 % respectively 25.1 % and 18.0% had never disclosed their experiences to anyone. At most, a quarter of the abused women had reported a violent incident to the police.

Conclusion:

All midwives, other health care personnel and actors who meet women with experience of abuse need to have improved knowledge about the long-term consequences of all types of abuse. This in order to increase the rate of asking women about their violent experiences to be able to prevent experiences of violence from affecting pregnancy and childbirth negatively by offering help and support.

P23**Midwives thoughts and experiences to care for pregnant women with SSRI treated depression**

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Background:

Background

Midwives within antenatal maternity health care are facing women with mental illness and the prevalence of depression during pregnancy has in studies been estimated to amount of 12-17%. Treatment for depression is primarily short-term psychotherapy and secondary pharmacological drug treatment, primarily SSRI.

Method:

A qualitative interview study with nine midwives was analyzed with inductive content analysis.

Findings:

Three main categories emerged: *the midwives view of their practical role in the meeting with the pregnant woman having depressive symptoms, the midwives' thoughts and emotions about using SSRI's during pregnancy and the*

midwives experience and knowledge about mental illness and the clinical application. It was revealed that the midwives diminished their own knowledge despite their utterances that showed knowledge in perinatal mental health. The midwives felt that treatment with SSRI's during pregnancy was not unusual and they felt comfortable talking to pregnant women about the treatment. The midwives were in favor of the use of a standardized screening instruments for depression during pregnancy.

Conclusion:

The study contributes to increase effectiveness of the maternal health care system, and address common perinatal health problems – resulting ultimately in improved health development trajectories in general, and mental health trajectories in particular, among women and their children.

P24

A team-approach for reducing severe pelvic lacerations

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Background:

Laceration injuries in connection with vaginal delivery is frequent in Swedish maternity wards. In an unacceptably large proportion of women, lacerations also include rupture of the anal sphincter. Vaginal and perianal lacerations as well as other injuries to the pelvic floor do not only cause acute suffering but may also result in long term complications including urinary and stool incontinence, coital pain, sense of wideness and problems with defecation.

The Swedish government decided in 2016 to strengthen and improve quality of maternity care, and Stockholm County decided to focus on reduce the number of large pelvic tears.

At Södertälje hospital, located south of Stockholm, intense efforts have been made during the last two years to reduce the number of lacerations.

Method:

We have done a number of improvements especially with regards to education of all levels of care givers through workshops and updated guide lines.

Every mother undergoes a risk assessment before bear down and in cases where the risk of severe lacerations is judged as high, the woman will be assisted by two midwives to correctly protect the perineum.

In cases of vacuum extraction the goal is to perform only traction and let the mother push to deliver the baby, instead of performing extraction. The procedure is done in a preferably sideways position that will reduce the pressure on the pelvic floor.

Findings:

During 2017 Södertälje hospital encountered sphincter injuries in 3% of the normal vaginal deliveries without any instrumentation and in 15.9% of all vacuum extractions. In contrast, during the first half of 2018, the incidence of sphincter injuries for normal deliveries and extractions had gone down to 1.9% and 3.9%, respectively.

Conclusion:

With dedicated education and good team work between all care givers with focus on the mother we successfully reduced the number of sphincter injuries, especially during vacuum extraction.

P25

Prevalence of emotional, physical, and sexual violence among youths visiting a Youth Centre in Sweden

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Background:

The prevalence of violence is high among youths, making them vulnerable. Thus, healthcare professionals at Youth Centers (YC) have an important role in identifying those at risk for exposure to violence, in order to decrease the suffering. The aims were to estimate the prevalence of emotional, physical, and sexual violence among youths visiting a Youth Centre and to investigate whether they disclose this to health professionals.

Method:

A cross-sectional study was performed at a Youth center in Sweden. Youths (15–25-years-old) answered an online web survey, in Swedish. Data were analyzed using descriptive and analytical statistics.

Findings:

Out of the 500 youths that participated, 43.2% of them reported that they had experienced emotional, physical, or sexual violence during their lifetime and 22.8% during the last year. There were gender differences regarding the type of violence reported; most common was emotional violence for women (27.6%) and physical violence for men (35.9%). Of those who reported any type of violence during their lifetime, 21.8% told health professionals at the YC versus 24.6% of those who experienced abuse during the last year. There were no differences regarding the type of violence experienced. There seems to be other reasons that influence the youth's decision to tell.

Conclusion:

Only a minority of youths previously exposed to violence told health professionals at the YC. To provide customized support to youths and reduce suffering as a result of violence, it is important to introduce evidence-based questions and screening for violence.

P26

Web-based trainings in an undergraduate midwifery study programme

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Background:

Since 2010, the University of Applied Sciences in Bochum offers the possibility to acquire an academic degree in midwifery. In order to improve self-directed learning and motivation, digital teaching and learning are constantly developed further. Web-based trainings (WBTs) are short online e-Learning sessions in which questions and concurrently presented material are used. Utilization of WBTs was optional for students and therefore the uptake was low.

Method:

A blended learning strategy was developed, which connects face-to-face teaching and digital teaching. It was aimed at more flexible and self-directed learning and better uptake by offering options to explore materials interactively and in depth. In addition, students were involved in the development of new WBTs.

Findings:

To enhance their uptake and efficiency, WBTs were implemented as an integral part of the study programme. From a general and optional offer, we changed to develop WBTs for specific modules. WBTs are now used for preparation, flipped-classroom teaching or as a follow-up for lectures. They are also used before, during and after skills-lab trainings.

New WBTs were developed in co-operation with small groups of midwifery students. Generating relevant questions and options for answers led to in-depth critical reflection on complex topics. Interspersing little credible pitfalls for their fellow students was fun for author groups. The newly created WBTs are now available to all students, facilitating self-directed learning.

WBTs are now available on routine clinical topics and the fundamentals of academic work. In addition, WBTs exist for rare clinical conditions and on emergencies, such as shoulder dystocia or postpartum haemorrhage. Some of them will be made available as refreshers to our alumni.

Conclusion:

Contributing to the development of WBTs was motivating for midwifery students, encouraging them to utilize WBTs more often in different contexts. Integration of WBTs in the curriculum still needs to be extended.

P27

Reasons for antepartum transfer of care from community birth midwifery care in the United States

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Background:

Relatively little is known about why American women who initiate care with a community birth midwife then transfer to a hospital-based provider. Presumably many are for pregnancy complications, as in the Netherlands, the UK, and other places with high community birth rates. However, the situation in the US is complicated by both inconsistent reimbursement and varying scopes of practice for midwives by state. Our objective was to describe the reasons for antepartum transfer among a group of women who initiated community birth midwifery care in the US; our *a priori* hypothesis was that lack of insurance coverage would be a major reason.

Method:

Data are from the Midwives Alliance of North America dataset, birth years 2012-2016. Midwives enter data, using their medical records for reference, and "log" clients into the system early in care. When a client leaves care, the midwife records the reason(s) for antepartum transfer before closing the record. In our dataset, preterm labor is counted as an antepartum transfer, because this contraindication for community birth requires an immediate transfer.

Findings:

Of the 66,680 women who initiated community midwifery care, 10,541 (15.8%) transferred care prior to onset of labor at term. The reason for transfer was medical for 52.9%, non-medical for 36.2%, and unknown for 10.9%. The most common medical reasons were hypertensive disorders, preterm labor, breech, and postdates, at 19.4%, 15.0%, 10.5%, and 7.4% of medical reasons, respectively. The most common non-medical reasons were client choice (29.8% of non-medical), client moved (24.0%), and insurance/payment problem (17.8%). We will present results stratified by demographics and state scopes of practice.

Conclusion:

Lack of insurance coverage for community birth is not as much a deterrent as we hypothesized, though we do not know how many women never initiated community midwifery care because of known payment issues.

P29

Facilitating and inhibiting factors in transition to parenthood - ways in which health professionals can support parents

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Background:

Objective and aim: The transition to parenthood is an overwhelming life event. Parents' experiences during transition to parenthood must be understood and documented. Professionals need this knowledge to create appropriate interventions. From a theoretical perspective, transition to parenthood is a developmental transition that contains certain phases and patterns.

Aims: To deepen understanding of transitional conditions that parents experience as facilitating and inhibiting in their transition to parenthood and to suggest health-professional interventions that might support and facilitate transition to parenthood.

Method:

Design: Meleis et al (2000) transition theory framed the study's deductive qualitative approach.

Methods: A secondary analysis of data collected from two previous studies that implemented individual interviews and focus-group interviews with 60 parents in Sweden between 2013 and 2014.

Findings:

These factors *facilitated* transition to parenthood: perceiving parenthood as a normal part of life; enjoying the child's growth; being prepared and having knowledge; experiencing social support; receiving professional support, receiving information about resources within the healthcare system; participating in well-functioning parent education groups; and hearing professionals comment on gender differences as being complementary. These factors *inhibited* transition to parenthood: having unrealistic expectations; feeling stress and loss of control; experiencing breastfeeding demands and lack of sleep; facing a judgmental attitude about breastfeeding; being unprepared for reality; lacking information about reality; lacking professional support and information; lacking healthcare resources; participating in parent education groups that did not function optimally; and hearing professionals accentuate gender differences in a problematic way

Conclusion:

Transition theory is appropriate for helping professionals understand and identify practices that might support parents during transition to parenthood. The study led to certain recommendations that are important for professionals to consider.

P30

The Quality register of midwives in the Netherlands

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Background:

In the Netherlands we have a maternity system, where women have choice of place of birth, including homebirth. Midwives are independent birthprofessionals who are responsible for care during pregnancy, birth and the newborn baby and mother.

Regulation of quality of care in the Netherlands is a mixed system. There is law, supervision by a healthcare inspector and a medical disciplinary board. And there is the organisation of midwives with a code of conduct and a quality register, initiated and developed by the Royal organisation of midwives (KNOV).

The aim of the register is that by registration in this register midwives demonstrate that they participate in education and training according to the standard of midwives.

There are basic principles. One of them is that midwives should do 200 hours of education every 5 years. This education is shown in a digital portfolio.

Birthcare is dynamic. For this reason the criteria for registration follow the developments in birthcare.

This is why we are renewing the basic principles in 2019. New is that education must be spread over minimum 5 competences (from the 9 Can med competences). Moreover a midwife should train emergency skills every year, instead of an average of hours over 5 years.

Also new is that midwives can do a self-assessment. This is a digital tool that is helpful to investigate in which competences a midwife needs to invest. This tool will be helpful in choosing subjects for education.

The quality register is widely accepted to prove quality of care to midwives, clients and insurance companies.

Method:

The quality register follows developments in birthcare.

Findings:

A quality register is a good instrument to prove quality of care and stimulate careprofessionals for life long learning.

Conclusion:

The quality registers remains a good instrument to prove quality of care in the Netherlands.

P31

Ready for the new life! An interview study about experienced support and information with first-time mothers

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Background:

In Sweden there is a well-developed and well-functioning care for future and new parents. There are a variety of factors that affect transition to parenthood. Advice and support during period of transition is vital. In spite of this knowledge and the clear guidelines for how care is to be taken, together with the declining nursing times, there has been a change in the attitude of becoming a parent and the expectations the parents have on the care they should receive. **Aim:** To investigate first-time mothers' experiences of the support and information during pregnancy and in the postnatal care as preparation for parenthood and the maternity

Method:

Interviews with 6 new mothers was performed on Maternity Ward 2-4 days after childbirth. A consecutive selection was made and a questionnaire was used. The material was analyzed by a qualitative content analysis with inductive approach.

Findings:

Results: Through the analysis, four categories were identified with a number of subcategories that appeared in the title "Feeling Ready for the New Life". The results were reported in the categories: *Experience of support and information during pregnancy as preparation for parenthood*, *Support experience and Maternity Ward information as preparation for parenthood*, *Expectations and concerns for the homecoming phase* and *Thoughts on follow-up and support after homecoming from Maternity Ward*.

Conclusion:

High competence in the staff and a continuity of care proved important. Group activities should be prioritized as an important factor in support and information. At Maternity Ward, information and support about breastfeeding should be prioritized even more and the possibility of communicating information based on the parents needs and wishes should be considered and developed. A more coherent care chain after childbirth is requested, which could probably increase safety, facilitate the transition to parenthood and prevent visits to emergency care.

P32

Crucial Barriers to Health Center Deliveries in Rural Western Kenya: Accessibility, Knowledge, or Values?

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Background:

Health services play a vital role in optimizing pregnancy outcomes for high-risk women in developing countries. Despite increased services, Kenya in particular has made insufficient progress to attaining MDG5. In order to understand why few women utilize available services, this study identified and categorized the major determinants of health center deliveries into accessibility versus knowledge and values.

Method:

Extensive interviews were conducted on the Nyakach Plateau in rural western Kenya with 90 native Luo women (43 pregnant and 47 previously pregnant). Subjects were asked about accessibility barriers, pregnancy knowledge, their values concerning a health center delivery, as well as their intended versus actual delivery location.

Findings:

In this cross-sectional study, 98% of the pregnant women intended to deliver at a health center but only 45% of previously pregnant mothers actually did so. Almost 100% of the sample valued health center deliveries, but 92% reported a transportation barrier followed by financial problems (76%) and a lack of services (64%). 82% walked for an average of 3.34 kilometers to their prenatal care appointments, however 55% were unable to complete the journey over rough terrain when in labor. With the sample living almost four times closer to a traditional birth attendant than to a health center, these women faced significant structural barriers that left 38% with serious problems resulting from pregnancy.

Conclusion:

These conclusions direct significant intervention efforts toward accessibility barriers, particularly transportation aid, to increase the number of health center deliveries. Knowledge and values, although important, are irrelevant if structural barriers prevent access to health services.

With these conclusions, a community-based program called Mothers On the Move (MOM) was started to provide expectant mothers with transportation to nearby health centers. To date, over 1,000 women have experienced positive birth outcomes at nearby health centers as a result of accessible maternal health services.

P33

Effects of out-of-pocket payment and private health care for pregnant women living in financial poverty in Germany

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Background:

During pregnancy and early motherhood some women experience severe and economic disadvantages that negatively affect their wellbeing. There is an increased risk of poor maternal and infant health outcomes. Normally, all costs for sufficient, appropriate and efficient health care services are payed as far as the pregnant women are members of the German statutory health insurance.

However, practice and research experiences show that gynaecologists and midwives offer and conduct a set of out-of-pocket payment, which are not part of the health insurance conventional care provision during pregnancy. In absence of medical indication, pregnant women have to pay extra. This applies to 3D/4D ultrasounds, special blood tests or partner fees for antenatal classes. Indeed, pregnant women request and make use of private payment irrespective of their socio-economic situation.

Method:

In order to a qualitative approach, personally guided interviews were carried out as part of the master thesis with ten women with low financial resources, 2 – 18 weeks postpartum. The interviews were conducted in three cities in North Rhine-Westphalia, Germany, and were recorded, transcribed and analyzed according to Mayring. Ethical principles according to the code of ethics of German Sociological Association and the requirements of the Helsinki Declaration were regarded.

Findings:

Women feel stressed by the offer of out-of-pocket payment. By this, they are confronted with their financial distress in the context of medical supply structure, and must decide about the handling of these extra services. Pregnant women feel burdened by both, complete waiver or selection of out-of-pocket payment, because they fear the exclusion from medical services.

Conclusion:

Private payments increase health inequality. To provide more transparency, the requests for evidence based and independent patient information should be considered. Specific population groups such as the poor and vulnerable pregnant women and children should be exempt from out-of-pocket payments.

P34

Planned home births in Stockholm funded by the County Council

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Background:

Around 100 women in Sweden plan homebirthing every year. Sweden lacks national guidelines, organisation and public funding for planned homebirths. Since 2002 it is possible for multiparas to plan a homebirth in Stockholm funded by the County Council. Little knowledge exists about the outcomes for the women and children who have received this form of care. The purpose of this study was to describe the outcomes for these births.

Method:

The method used was a retrospective journal-study with a quantitative approach. The study population consists of 233 women planning a homebirth and who applied for funding from the Stockholm County Council between 2007 and 2013. Data consists of the women's journals from care during pregnancy and birth, which has been analysed with SPSS and presented as descriptive statistics.

Findings:

The study indicated that most women (94,4 %) had a spontaneous vaginal birth at home, whilst very few women (5,6 %) were transferred to hospital during birth. One woman had a sphincter laceration (0,5 %), in no births Vacuum or forceps were used and no women gave birth in the lithotomy position. Three of the newborns (1,3 %) had Apgar <7 at 5 minutes and at 10 minutes all newborns except for one had Apgar 9 or 10.

Conclusion:

Planned homebirth within the framework established by Stockholm County Council appears to be a safe option for women and children.

P35

A randomised controlled trial in Sweden comparing an innovative person-centered adaptable birthing room with standard birthing rooms - A study protocol

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Background:

Healthcare environment is known to influence health outcomes, but there are few studies regarding the effects of physical aspects of the birthing room on maternal and neonatal outcomes. The aim of this project is to study the influence of design of birthing rooms on labour, birth and childbirth outcomes and experiences in women, through a randomised controlled trial (RCT).

Method:

The RCT will measure and compare effects and experiences of two types of birthing rooms in nulliparous women with spontaneous labour start, in one labour ward at a university hospital in Gothenburg, Sweden. Outcomes for women receiving care in regular birthing rooms (control) will be compared with those of women receiving care in an adaptable birthing room designed with a person-centred approach (intervention). In the person-centered, flexible room, women can adapt physical aspects as they wish, thus creating an environment appropriate to their individual needs, which may contribute to improved quality of hospital-based care at birth.

Findings:

Participants will be randomised on a 1:1 ratio to receive care in either the intervention room or one of the regular rooms. Outcomes of labour and birth, women's experiences, and quality of life will be measured. The primary efficacy endpoint is a composite score of four parts. To detect a difference of 8% between the groups we need 1400 study participants (power of 80% with significance level 0.05). Routines to conduct the study were developed and tested for feasibility in a pre-pilot study in autumn 2018 leading to the final study protocol, which will be presented at the conference. The full study is planned to start January 2019.

Conclusion:

The development of a study protocol will provide guidance on how to conduct the RCT to understand the effect of design of hospital-based birthing rooms on labour, birth and childbirth experiences in nulliparous women.

P36

Incorporating lessons learnt from 10, 000 Happy Birthdays Project to improve 50,000 Happy Birthdays Project

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Background:

The goal of the 10,000 Happy Birthdays Project 2014-2016 was to contribute to improving quality maternal and newborn care by training 10,000 midwives and other healthcare providers in Malawi and Zambia. By using simulation-based training and low-dose, high-frequency (LDHF) practice sessions, the modules used in this project contributed to improved management of post-partum haemorrhage (PPH) and birth asphyxia. Training was implemented in both health facilities and pre-service education.

Method:

An external consultant conducted qualitative and quantitative evaluation to determine the extent to which the project had met the goals of training healthcare providers, institutionalizing the training programs into education curricula, assess the effectiveness and efficiency of activities undertaken by ICM as project lead, provide feedback and recommendations for future projects.

Findings:

The findings of the evaluation indicated that the benefits of the project were improved teaching and learning methods, improved knowledge, skill and confidence of care providers to manage PPH and birth asphyxia, and strengthened Midwives Association capacity. Some challenges existed, that if addressed, could add to the quality of future projects. These included a harmonized monitoring and evaluation framework between project countries, increased guidance for conducting LDHF practice sessions, more frequent and structured supportive supervision visits and enhanced tracking of training resource distribution.

Conclusion:

ICM has engaged an evaluation consultant to collaboratively develop a more comprehensive Monitoring, Evaluation and Learning (MEL) framework. Increased emphasis and guidance on LDHF practice has been provided to the Midwife Association project managers using examples for implementation from the HMS and HBS program tools. Supportive supervision visits have been added to the activity plan and budget in all project countries with specific roles and responsibilities for the individual conducting the visits. Increased reporting requirements regarding sites where training resources are distributed have been implemented.

P37

Pregnancy and chronic disease: The effect of a multimodal coordinated maternity care intervention (ChroPreg) on length of hospital stay: a parallel randomized controlled trial

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Background:

The number of women of childbearing age with chronic medical diseases is rising. The risk of obstetric complications and poor psychological well-being is higher among these women, and research is needed to investigate how to meet the obstetric and psychological needs of this group during pregnancy and postpartum in maternity care. Previous research has shown that care coordination, continuity of care, and specialized maternity care interventions delivered to women with high-risk pregnancies can improve patient-reported outcomes, pregnancy outcomes and be cost-effective. No studies have examined the efficacy and cost-effectiveness among women with chronic diseases. This paper describes the protocol of a randomized controlled trial (RCT) of a coordinated, individualized and specialized maternity care intervention for pregnant women with chronic medical diseases.

Method:

This two-arm parallel group RCT study will be conducted from October 2018 – June 2020 at The Department of Obstetrics, Copenhagen University Hospital, Rigshospitalet, Denmark. Women with chronic medical diseases will be invited to participate; 274 women will be randomized and allocated 1:1 to routine hospital care or to the intervention. The complex intervention (ChroPreg) has three components: 1. *Coordinated and individualized care*, 2. *Focus on psychological well-being and preparation for birth and the postnatal period*, and 3. *Training of specialized midwives*.

The primary outcome is Length of Hospital Stay (LOS) and secondary outcomes are: psychological well-being (The five-item World Health Organization Well-being Index, Edinburgh Postnatal depression Scale, Cambridge Worry Scale), health-related quality of life (The 12-Item Short Form Survey), patient satisfaction (The Pregnancy and Childbirth Questionnaire), pregnancy and delivery outcomes, and health-economic outcomes. Data is obtained through patient-reported questionnaires and from medical records.

Findings:

Discussion: This trial is anticipated to contribute to the field of knowledge used in planning antenatal and postpartum care for women with chronic disease.

Conclusion:

Trial Registration: ClinicalTrials.gov: NCT03511508. Registered on 22 June 2018

P38

Does centralization improve quality of care?

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Background:

In Germany centralisation of obstetric care and the associated close-down of small obstetric units to improve quality of care get more and more on focus. But in fact, does this development really improve quality of care, if quality of care is defined as care during childbirth without medical interventions? Interventions do not necessarily improve the health of mothers and their children. Therefore, intervention rates must be more focused. Aim of this study is to analyze childbirth-without-intervention rates in different-sized hospitals.

Method:

Retrospective cohort study. Data: hospital deliveries in the German federal state Hesse from 2005 to 2015 (n = 305,980). Inclusion criteria: Primi-/multiparae, singleton in cephalic presentation, 37+0 – 41+6 weeks gestation. Exclusion criteria: induction of labour, stillbirth, HELLP syndrome; (pre) eclampsia; placenta praevia, and planned caesarean section. Data analysis: descriptive statistics, Chi-square tests, SPSS Statistics 24.0. Childbirth-without-intervention is operationalised as follows: no augmentation, no epidural anaesthesia, no amniotomy, no episiotomy, no operative assisted delivery or unplanned c section. Hospitals are divided in four size categories (category 1: up to 500 births, category 2: 501-1,000 births, category 3: 1,001-1,500 births, category 4: above 1,500 births per year).

Findings:

In hospitals of category 4 there is a greater chance for childbirth without interventions in comparison to hospitals of category 3 (OR 1.13 [95% CI 1.11-1.16]), category 2 (OR 1.22 [95% CI 1.20-1.25]) or category 1 (OR 1.36 [95% CI 1.32-1.39]). Within every single category there is a high range of childbirth-without-intervention rates: category 1 (22.0%-72.3%), category 2 (21.9%-61.5%), category 3 (28.3%-64.8%), category 4 (34.2%-56.0%).

Conclusion:

Our data seem to support the intended close-down of small obstetrical units. Concurrently, our data show high ranges of childbirth-without-intervention rates in every category. Considering the sample of low risk women this should not be expected. Further research is needed.

P39

Swedish and Australian midwives' experiences of providing antenatal care Somali-born women.

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Background:

The midwives role is to provide support and identify individuals with special needs in the meeting with prospective parents. Several studies indicate that Somali pregnant women are at greater risk of pregnancy complications, making them a vulnerable group. Studies show that communication problems and the need for interpreter can be possible obstacles in the meeting between immigrants and healthcare professionals.

Method:

Ten midwives in Australia and eight midwives working in the antenatal care clinics were interviewed and the analysis was done by thematic analysis.

Findings:

Three themes emerged from the comparative analysis and encapsulate the Swedish and Australian midwives' experiences caring for Somali women during pregnancy: *Midwives' attitudes to Somali women and their family and cultural context*, *Challenges in building rapport* and *Overcoming challenges to improve care*.

Conclusion:

There were both similarities and differences as midwives experienced to care for Somali women in the two countries. It seems that there are different traditions and care cultures that affect the midwife's experience

P40

How can the physical design of birth environments support the needs of women and family's during birth? - A qualitative study of women's birth experiences

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Background:

The physical environment has a profound influence on experiences, health and wellbeing of birthing women. An alternatively designed delivery room, inspired by the principles of healing architecture and Snoezelen, was established in a Danish regional hospital. The aim of the study was to explore women's experience of the environment and its ability to support patient-centered care.

Method:

Fourteen qualitative and semi-structured interviews were undertaken 3–7 weeks after birth.

Findings:

Excerpts of results from this study suggests that the environment, was accommodating to the women and family's needs as it reduced stress- and anxiety during transition to hospital setting. Furthermore, it was found fitting to the interplay between the woman and her partner. The Interior, furniture, and equipment present in the delivery room seemingly played an important role in supporting these experiences.

Conclusion:

The excerpts of results supports the understanding of how the physical design of birth environments influence on the well-being of patients and could play a central role in the discussion of how to make future birth environments not only patient-centered but also based on a family- centered approach.

P41

Health and healthcare seeking behaviour among pregnant undocumented migrants in Denmark.

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Background:

Pregnant undocumented migrants in Denmark have limited access to antenatal care, as they solely have legal rights to healthcare in case of acute needs. Therefore, they are compelled to seek antenatal care through informal networks. Antenatal care is important because it serves to prevent, detect and treat dangerous conditions in both the mother and unborn child. Timing of the first entry to antenatal care and number of visits during pregnancy has proven significant for the pregnancy outcome. Research on the health and healthcare seeking behaviour of pregnant undocumented migrants is sparse. This data this study aimed to fill this knowledge gap by investigating the health and healthcare seeking behaviour of pregnant undocumented migrants who attended the Red Cross Health Clinic for Undocumented Migrants in Denmark, including whether healthcare seeking behaviour differs according to demographic factors

Method:

We used data from medical records at the Red Cross Health Clinic in Denmark 2011-2017. Data on 675 pregnant women was analyzed using frequencies, cross tabulations and logistic regression

Findings:

We found that the majority of the women were healthy but 52.6% had a late first entry to antenatal care, and 92.9% had an inadequate number of antenatal visits. Furthermore, healthcare seeking behaviour differed according to demographic factors such as age, parity, country of origin and migration background.

Conclusion:

The study showed that the undocumented migrants had a suboptimal utilization of antenatal care. Further research must be performed to gain more knowledge regarding this vulnerable group of pregnant women. However, precaution related to the internal validity of the study must be exercised.

P42

Childbirth in Complex Situations - a new module in the midwifery master's program at the Zurich University of Applied Sciences (ZHAW)

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Background:

These days, midwives are more often confronted with complex care situations, e.g. women with chronic illnesses or a condition after Caesarean section. In order to meet the growing demands for continuing care, midwives in the individual care setting as well as in an interprofessional team have to meet the needs of women and solve medical problems. Therefore, there is a need to develop and implement concepts for future-oriented obstetric care. As a result, the module "Childbirth in Complex Situations" has been developed for the master's program in Midwifery at the ZHAW.

Aim: The aim of the module is to enable students to analyze complex obstetric situations, develop and implement concepts for a women- and family-centered care, describe the role of the midwife, and act appropriately in the individual situation.

Method:

Based on the framework for Quality Maternal and Newborn Care (Renfrew et al., 2014), complex obstetric situations were analyzed. Subsequently, cases were developed and the theoretical framework was used to identify relevant teaching topics. Furthermore, existing models of care were chosen for analysis and further development.

Findings:

Casework is used to focus on bio-psycho-social problems of the care situation, taking into account the needs of women. The cases are embedded in a theoretical reflection of the concept of risk. In the skills lab, counseling in complex situations is trained and the role of experts, women and families is analyzed. Finally, existing models of care are examined critically. Tools for analysis, development and implementation are applied and suggestions for new models of care and the role of the midwives in these care settings are made.

Conclusion:

Evaluation shows that the teaching and learning scenarios contribute to the development of competencies needed to meet the needs of women in complex obstetric situations.

P43

Modifiable factors in midwives clinical skills associated with obstetric anal sphincter injurie

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Background:

The objective of this study was to investigate the association between obstetric anal sphincter injurie and modifiable factors related to midwife-led birth such as manual support of perineum, active delivery of baby's shoulders, maternal birth position, and pushing and breathing techniques in second stage of labour.

Method:

A prospective cross sectional study including primiparous (n = 129) and multiparous (n= 628) women in midwife-led non-instrumental deliveries with OASI (n=96) or intact perineum (n =661). Data were collected in a University hospital in Norway with two different birth settings; an alongside midwife-led unit and an obstetrical unit.

Findings:

This selected sample comparing the most serious outcome (OASI), and the optimal outcome (intact perineum). In primiparous women, 47.3% suffered OASI and 52.7% had intact perineum, while for multipara women, 5.6% suffered OASIS and 94.4% had intact perineum. There was an increased risk of OASI if the women actively pushed when the head was crowning compared to breathing the head out (adjusted OR: 3.10; 95% CI: 1.75 to 5.47). The maternal birth position associated with the lowest risk of OASI was kneeling position (adjusted OR: 0.15; 95% CI: 0.03 to 0.70), supine maternal birth position (adjusted OR: 2.52; 95% CI: 1.04 to 4.90) and oxytocin augmentation more than 30 minutes in second stage (OR: 1.93; 95% CI: 1.68 to 15.63) were associated with an increased risk of OASI, when adjusting for maternal, foetal, and obstetric factors.

Conclusion:

Actively pushing when the baby's head is crowning, a supine maternal birth position and oxytocin augmentation more than 30 minutes in second stage, were associated with increased risk of OASI when compared to intact perineum. A kneeling maternal birth position was associated with a decreased risk of OASI.

P44

How do Danish midwives protect perineum? - a study to find out which delievery techniques used by midwives protect the perineum against injuries during childbirth

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Background:

About 80 % of Danish women giving birth vaginally get vaginal and/or perineal injuries that needs suturing. In Denmark about 4% of birthing women get obstetric anal sphincter injuries (OASIS). Midwives use methods to protect the perineum manually during birth to prevent this. Danish obstetricians recommend in their national guideline that danish birhwards should implement the "Norwegian Model" to prevent OASIS which was reduced considerably in Norway. This model is based on retrospective cohort studies from Norway and consists of four factors, including specific manual protection of the perineum. Many birthwards in Denmark implemented this model in order to prevent OASIS. Some midwives were critical to the evidence of the Norwegians studies and concerned about birthing womens right to choose birth position and water births as this wasn't possible within the frame of the model. The aim of this study was to find out which delivery techniques midwives used in Næstved Hospital to prevent perineal injuries and to find out if there was a connection between the different manual methods used by the midwives, birthing position and other more or less known risk factors for OASIS and the degree of perineal and vaginal injuries.

Method:

From 1.09.2014 to 31.01.2016 midwives in Næstved Hospital, in Denmark, filled out a structured questionnaire after attending vaginal birth. Data was collected from 1368 births during that period. The first analysis was a bivariate statistic analysis.

Findings:

The bivariate analyses didn't show connection between different kind of manual protection techniques, and other delivery techniques, birthing positions and the degree of vaginal or perineal tears. Known risk factors for OASIS are also significant risk factors for OASIS in this study.

Conclusion:

Further analysis using a multivariate analysis of the data is now in progress and these results will also be shown in the poster.

P45**Exploring the Differences Between Expectations and Outcomes - a Case Study on a Midwifery Net-based Education in Somalia**

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Background:

Midwives educated according to international standards and high quality midwifery care is widely acknowledged as making a vital and cost-effective contribution to high-quality maternal and newborn quality care in many countries. Investments in development focusing on midwifery education and midwifery care research is the single most impactful means to strengthen midwifery care. Being a post conflict setting the Somalia region cater for one of the highest maternal and child mortality rates worldwide, and one key issue is the shortage of qualified healthcare providers. There is an urgent need to educate qualified competent midwifery educators who can teach evidence-based midwifery care and practice in a manner that take into accounts the contextual situation of Somali region.

Method:

In the study, we compared the expectations midwifery students had of the program and the outcomes after graduation. Data was collected in focus group discussions at the start of the program and eight months after the students graduated. The data were analysed through the lens of the choice framework, which is based on the capability approach.

Findings:

Findings show that many of the students' expectations have been met, while some were more difficult to fulfil. While the midwives' choices and resource portfolios had improved in their role as teachers, the social structure prevented them from acting on their agency, specifically in regards making changes on a social level. Several of the positive developments can be attributed to the pedagogy and structure of the program. The flexibility of a net-based education gave the midwifery teachers a new educational opportunity that they previously did not have.

Conclusion:

Students gained increased power and influence on some levels. However, they still lack power in government organisations where, in addition to their role as teachers, they can use their skills and knowledge to change policies on a social level.

P46**Mothers' Birth Experiences: A Nationwide Study from Finland**

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Background:

Childbirth is a strong experience in woman's life which influences on the whole family. In Finland, nearly every mother gives birth in a hospital. The aim of this study was to describe the quality of maternity services in Finnish maternity hospitals from mothers' perspective.

Method:

The data were collected with a 5-point Likert scale questionnaire from all 26 Finnish maternity hospitals in autumn 2016. All mothers who gave birth during the recruiting period were invited. The final data consisted of 23 hospitals with 1760 respondents and were analyzed using descriptive statistics.

Findings:

The response rate varied between 12 % and 69 % by the hospitals. The mean age of the mothers was 30 years. Most of the mothers were Finnish speaking (94 %), primiparous (57 %) and had a vaginal delivery (85 %). Nearly all (84 %) mothers agreed that they could recommend their birthing hospital to others. In overall, mothers evaluated the quality of care rather good (mean 4.2/5). The means for the quality of counseling, staff properties and actions, as well as hospital properties were 3.9/5, 4.3/5 and 4.3/5, respectively.

The type and the location of the maternity hospital, parity, mode of childbirth, and first language were associated with the mother's experience of all aspects of quality of maternity services. The mothers who were offered pain relief, who had had a postnatal birth discussion and who evaluated the postnatal birth discussion beneficial and the skin-to-skin contact with the baby long enough, were significantly more satisfied with all aspects of quality of maternity services.

Conclusion:

According to the mothers the quality of maternity services in Finnish maternity hospitals is good. Postnatal birth discussion with the staff and the sufficient length of the skin-to-skin contact are associated with the mother's positive experience of the quality of maternity services in hospital.

P47

Does fatherhood change the meaning in life for first-time fathers? A qualitative study using the 'Sources of Meaning Card Method' focusing on existential perspectives in fatherhood

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Background:

Transition into fatherhood can be experienced as a complex and challenging period and one of the greatest changes a man can go through in life. Existing literature describes the practical and relational perspectives of fatherhood in relation to infants and mothers. However, a deeper existential perspective of fatherhood from the fathers' point of view is missing from this literature. The purpose of this study was to explore how meaning in life changes or is affected by becoming a father.

Method:

The project was an explorative interview study using a phenomenological approach. Semi-structured interviews based on a new method "The Sources of Meaning Card" was used to facilitate perceptions of six fathers' experiences and considerations related to especially sources of meaning in life.

Findings:

The participating fathers did not experience a change in *which* sources provided meaning, but rather a change in the way they experienced and expanded their sources of meaning after becoming a father. They saw this as a consequences of how the sources adapted to the new circumstances of fatherhood where one's time is no longer one's own and focus is directed towards the child and the family as a unit. Furthermore, the new fathers experienced feeling alone in fatherhood which in part was regarded both as an *isolation* from friends and *being alone* as an existential condition of life. However also emotional *loneliness* was found to be a new and radical change when becoming a father. *Isolation* and *being alone* was considered as natural and mostly unproblematic consequences of fatherhood, whereas *loneliness* was experienced negatively.

Conclusion:

Fatherhood seemed to be meaningful for the participating fathers and affected their experience of meaning in life. Furthermore, fatherhood seemed to contain both a natural measure of being alone and a negative loneliness which future fathers should be aware of.

P48

Electronic monitoring of Baby-Friendly - Hospital standards (BFHS)

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Background:

In 2018 WHO launched the revised Baby-Friendly Hospital Initiative (BFHI) to promote breastfeeding. All facilities providing maternity care need to monitor their own activities to see if they are working according to the 10 steps for successful breastfeeding (BFHI). In Norway we have performed an electronic monitoring of almost all the facilities since 2013, to see if they were working according to the BFHI.

In 2016, 40 hospitals agreed to electronic monitoring performed by the Norwegian National Advisory Unit on Breastfeeding

Our presentation focuses on Step 6: Mothers should be discouraged from giving any food or fluids other than breast milk, unless medically indicated.

Method:

Mothers received a link to an electronic questionnaire after birth asking about breastfeeding information provided to them during their stay. The aim was to evaluate alignment of that information with the BFHI 10 steps. The health staff registered all use of supplements given in the same period using Opinio software. 1066 mothers answered the questions, and more than 3000 registrations were performed by the staff.

Findings:

On average, 31% of healthy newborn babies received supplementation; many without a medical reason. Both the mothers and personnel reported concerns such as insufficient milk, baby is fussy and too much weight loss. Many hospitals did not pass WHO's BFHI requirement that $\geq 80\%$ of infants should not receive any other food but breast milk throughout their stay at the facility, absent a medical reason.

Conclusion:

Continuous electronic evaluation is a reliable, efficient and cost effective way of monitoring the Hospitals. It gives a realistic picture of the hospitals' key clinical practice regarding mothers' answers and staffs' registration. It should be implemented in the Hospitals' ongoing internal adherence monitoring for clinical practices according to the 2018 WHO recommendation.

P49

Multivitamin use and risk of preeclampsia

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Background:

Worldwide, preeclampsia is a major cause of maternal and perinatal morbidity and mortality. It affects 3-4% of all pregnancies. It is hypothesised that preeclampsia could be the result of abnormalities in placental development, which causes oxidative stress and contributes to an increased risk of preeclampsia. To prevent oxidative stress, supplementary micronutrients could play a beneficial role in optimising the antioxidant status in the pregnant woman. The aim of the study was to examine the association between multivitamin use and risk of preeclampsia.

Method:

This was a prospective cohort study and included 15,272 pregnant women attending the Department of Obstetrics, Rigshospitalet, between 16 September 2012 and 31 October 2016. When booking an appointment for a nuchal translucency ultrasound examination, all women were sent a clinical questionnaire by email. The self-reported data on multivitamin use were merged with data from the Danish Medical Birth Register, which includes data on preeclampsia diagnoses. We used multiple logistic regression to assess the association between multivitamin use and risk of preeclampsia, and to adjust for potential confounders.

Findings:

Regular multivitamin use was seen among 85% of the women. A diagnosis of preeclampsia was found in 397 women (2.6%). We found no association between multivitamin use and risk of preeclampsia, adjusted odds ratio (AOR) for regular periconceptional multivitamin use = 1.03 (95% CI: 0.72 to 1.46) and AOR for postconceptional multivitamin use = 1.04 (95% CI: 0.75 to 1.44). Subgroup analysis stratified on body mass index showed that among overweight women postconceptional multivitamin use was associated with a statistically significant reduced risk of preeclampsia (AOR=0.41, 95% CI: 0.20 to 0.83). We found that obese women with multivitamin use periconceptionally had a non-significant increased risk of preeclampsia compared to obese non-users (AOR=3.09, 95% CI: 0.69 to 13.96).

Conclusion:

Regular use of multivitamin during pregnancy may reduce the risk of preeclampsia among overweight women.

P50

Working pregnant women's experiences with sick leave caused by low back pain. A qualitative interview study

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Background:

In Scandinavia, women of childbearing age represent nearly 50% of the overall workforce. Two-thirds of these women spend a considerable time on sick leave during their pregnancies. Low back pain accounts for a significant portion of all pregnancy-related sick leave. However, pregnant women's experiences with pain-induced sick leave remain unexplored. In order to gain an in-depth understanding of the personal and work-related mechanisms surrounding LBP-induced sick leave among working pregnant women, this study aimed to investigate women's experiences with sick leave in relation to pregnancy-induced LBP.

Method:

An inductive, qualitative study based on semi-structured, in-depth, face-to-face interviews with 19 purposefully selected Danish women. Interviews were analysed by means of thematic content analysis.

Findings:

The analysis revealed 4 categories: (1) Stuck in a diagnosis, (2) Inflexibility of the labour market, (3) Adapting to reduced capacity for work, and (4) Being socially excluded. The women's experiences revolved around disruption of their physical functioning and expected capacity for work, a loss of professional identity, and a sense of inflexibility and exclusion from important relationships at work. Women struggle to restore balance and regain control of their professional and private lives, which may lead to feelings of defeat, self-blame and inadequacy. Notably, the women generally felt stuck and let down by the healthcare system, managers, colleagues, and prevailing attitudes of society.

Conclusion:

Our findings illuminate the possibilities for workplace adjustments with the intention of reducing sick leave, maintaining pregnant women's affiliation with their workplace, and a need for exploring the role of healthcare professionals in addressing women's supportive needs in relation to sick leave.

P51

Master of Advanced Studies in Midwifery Skills plus

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Background:

The demands on the skills and knowledge of midwives in a practical environment become greater as they become more complex. Moreover the Swiss healthcare system is undergoing major changes and the areas of work of midwives are changing too. Midwives must possess advanced professional and academic skills. Clinics require midwives who can apply advanced knowledge and are able to implement it in everyday practice as well as guide, accompany and advise colleagues. Self-employed midwives need evidence-based knowledge to provide expert care to women and their families. Midwives with advanced skills contribute significantly to securing and improving the quality of care for women and their families, and also take on new roles in an inter-professional context.

Method:

To develop a continuing education programme for midwives at the University of Applied Sciences which concludes with a MAS. The focus is on specialised knowledge which is scientifically based and directly related to the practical activity of a midwife.

The MAS in Midwifery Skills ^{plus} consists of 9 modules and a master thesis. The modular design of the MAS allows individual planning of this part-time continuing education programme. The contents can be chosen according to personal and professional interests.

Findings:

The contents focus on the various areas of activity of midwives while going into more detail on understanding pregnancy, childbirth and the postpartum period in relation to independent midwifery care.

Conclusion:

Midwives with MAS take on new areas or the functional management of one or more areas. In this position, they advise professional and interprofessionell teams in expert decision making and support quality development in midwifery.

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P52

Social media in the infertile community - What do they blog about? A female perspective

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Background:

Blogs about health condition, just as infertility allocate realistic knowledge about the blogger's illness-related behavior. The illness blogs can be a specific form of self-expression, where feelings, thoughts, creativity and information are shared. Illness narratives can help to reduce the psychosocial consequences of the illness. Infertile women use the infertility blogs as source of information and for social support. The aim was to explore the content of infertility blogs in Sweden.

Method:

The blog owner's postings from 25 blogs with focus on infertility, three years backwards, were retrieved. Data was collected from May 2017 to September 2017. This resulted in 4492 postings. Approval from the Ethical Review Board, Stockholm (*EPN Diar.nr.: 2015/2290-31/5*) was obtained.

Interactive quantitative-qualitative thematic analysis was used by utilizing the Gavagai Explorer analysis program.

Findings:

Twenty of the bloggers were anonymous and age of the blogs ranged from three to 18 years. Experience of infertility was described as riding an emotional roller coaster. Three main themes emerged during the data analysis: emotions (21,7%), relations (12,5%) and body, care and treatment (8,1 %).

Conclusion:

Women blogged about infertility with reference to emotions, relations and reference to body, care and treatment.

P53

Clinical ethical reflection in midwifery practice

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Background:

Midwives in Denmark often find themselves in ethically challenging situations concerning dilemmas of guidelines for medical treatment, midwifery values, and women's preferences. These situations may be demanding in daily work due to rapid technological development and complex issues. Several hospitals in DK have established clinical ethical committees. They work with dilemmas based on cases and help putting ethics on the agenda in everyday life in the hospital. The clinical ethical committees illuminate and unfold issues, but they do not make decisions. They work with different models as tools for ethical reflection and they have the same purpose: to provide a structured and systematic framework for a dialogue that can clarify the problem of a case and support ethical decisions.

Method:

Inspired by the work of the clinical ethical committees and the tools for reflection we train students and educated midwives in ethical reflections. The training takes place for students 2 times during studies after teaching ethics. When graduated the midwives volunteer meeting three times pr. half year to reflect ethically on experienced cases

Findings:

Preliminary findings show an increasing interest among midwives in working with ethical dilemmas in a structured way. I present a model for ethical reflection as a means of training students and midwives and results of the work with ethical reflection. Examples show that this helps to illuminate difficult situations and to solve ethical dilemmas.

Conclusion:

Ethical dilemmas do not become easier, but shared decision making with pregnant women are facilitated and becomes less paternalistic. Reflecting ethical issues in daily practice in a structured way paradoxically seems to make midwives more sure of themselves because the difficult issues are being looked into and are acknowledged as dilemmas.

P54**Type 1 diabetes - pregnancy and labour**

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Background:

Type 1 diabetes (T1DM) increases the risk of complications during pregnancy and labour, thus obstetrical and diabetological care is a highly specialized task. In Denmark, this is performed at university hospitals such as Odense University Hospital (OUH). This study investigates certain pregnancy/labour complications at OUH during 2009-2014 in women with and without T1DM. Whether a change in prevalence of complications in women with T1DM from 1993-1999 to 2009-2014 has occurred, is also addressed.

Method:

The study is based upon birth statistics and retrospective reviews of medical records from OUH from 2009-2014. Data on women with T1DM are compared to data on the background population of delivering women at OUH and to data from a national study on women with T1DM in 1993-1999. Data are analyzed using t-test, Mann-Whitney U-test, Fisher's exact test, χ^2 -test, quantile and logistic regression. P-values < 0.05 (two-sided) are considered statistical significant.

Findings:

T1DM is associated with significantly increased risk of caesarean section (OR 4.77 (95% CI 3.55-6.44)), vacuum delivery (OR 2.46 (95% CI 1.17-4.73)), preterm birth (OR 4.42 (95% CI 3.19-6.05)) and macrosomia (OR 2.6 (95% CI 1.42-4.44)) compared to the background population. No significant difference in post partum hemorrhage was found; preeclampsia was not investigated (lack of data). In women with T1DM, the prevalence of preeclampsia (OR 0.47 (95% CI 0.27-0.77)) and preterm birth (OR 0.57 (95% CI 0.41-0.80)) have been significantly reduced since 1993-1999. No significant differences in prevalence of caesarean section (OR 1.34 (95% CI 0.98-1.85)) and macrosomia (OR 0.92 (95% CI 0.49-1.64)) were found; post partum hemorrhage and vacuum extraction were not investigated (lacking data).

Conclusion:

T1DM is still significantly associated with an overall increased risk of pregnancy and labour complications when compared to the background population despite a significant decrease in overall risk of complications in women with T1DM in 2009-2014 compared to 1993-1999.

P55**Ethical dilemmas and legal aspects in contraceptive counselling for women with intellectual disability - focus group interviews among nurse-midwives in Sweden**

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Background:

The aim was to gain a deeper understanding of ethical dilemmas and legal aspects during contraceptive counselling for women with ID.

Method:

We interviewed 19 nurse-midwives in five focus groups in Sweden 2016 – 2017 and analysed data with content analysis.

Findings:

The nurse-midwives expressed that women with ID have equal right to relationships and sexual expressions, but feared them being exposed to sexual exploitation/abuse. The participants experienced ethical dilemmas related to principles of fairness and autonomy. The participants strived to provide assistance and not cause any harm in spite of the women with IDs cognitive impairment, insufficient knowledge, presence of supporting persons and uncertainty of optimal non-directive counselling. They also described insufficient teamwork and support from the health care organisation.

Conclusion:

The nurse-midwives experienced ambivalence, uncertainty and ethical dilemmas when counselling women with ID. They were, however, aware of legal aspects and strived for the women's best interest, right to self-determination and autonomous informed choices. The nurse-midwives wanted to have better professional teamwork and support.

P56

Embrace.

Karin Osterman

Present occupation Umea University Hospital Delivery ward, UMEA, Sweden

Background:

The mothers body is the biologically normal place of care, both for normal healthy newborn babies and for the smallest preterm baby. When the mother through her own body provides the baby skin-to-skin care (SSC), which is a safe warm and secure place, the baby can use all its energy to develop. SSC is found to have positive effects on cardio-respiratory, thermal stability and increased blood glucose levels compared to babies separated from their mothers. Low birth weight infants had significantly less need for respiratory support, intravenous fluids and antibiotic use during the remainder of the hospital stay.

The aim of this study was to visualize via a thermographic camera, the warmth, support and care the mother provides her newborn with SSC.

Method:

After written consent from both parents who had given birth to a healthy, stable child and could read and speak Swedish fluently, a thermographic camera was used to photograph parents and newborns to describe and document in a poetic and artistic way the warmth and support given from parents to child.

The photographs were taken in Region Gävleborg, Sweden, 2015-2016 after approval from the Director of Department.

Findings:

The findings are photographs with a high emotional and artistic value which I want to show at the conference in a slideshow.

Conclusion:

During history women and men of science and explorers have used art to describe and reproduce their results. Through paintings, sketches and graphic art they have been able to share their findings. This is my contribution to share knowledge about and inspire my colleagues to promote SSC.

P57

The predictive role of midwifery support in the birth experience: a longitudinal cohort study in Iceland

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Background:

Birth experience is known to have profound long-term effects on women's psychological well-being and their relationships with family. Several risk factors for a negative birth experience have been identified, although little is known about if midwifery support, in particular during pregnancy, influences women's birth experience. The aim of the study is to detect the predictors of negative birth experience in low-risk women, in particular that of women's satisfaction with midwifery support.

Method:

A longitudinal cohort study was conducted with a convenience sample of pregnant women from 26 community health care centres. Data was gathered using questionnaires at 16th week of pregnancy (T1, n=1111), at five to six months (T2, n=765) and 18-24 months after birth (T3, n=657). Information about socio-demographic factors, reproductive history, birth outcomes, social and midwifery support, depressive symptoms and birth experience was collected. Binary logistic regression analysis was performed in order to examine predictors of negative birth experience at T2 and T3.

Findings:

Women who were not satisfied with midwifery support in pregnancy and during birth were more likely to have a negative birth experience than women who were satisfied with midwifery support at T2. Furthermore, being a student, any operative birth and perception of prolonged birth predicted negative birth experience at both time points. Between 5-5.7% of women perceived their birth as negative.

Conclusion:

Perceived support from midwives during pregnancy was acknowledged to have a significant impact on women's perception of their birth experience. The perception of birth experience remains consistent over time.

P58**Depression, anxiety and stress in Swedish midwives**

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Background:

Midwives' emotional well-being could be reason for workforce attrition. The aim was to investigate the prevalence of symptoms of depression, anxiety and stress among Swedish midwives in relation to background variables, burnout and quality of life.

Method:

A random sample of 1000 midwives, members of the Swedish Midwifery Association, were asked to participate and fill out a questionnaire. This study is one part of the WHELM project. We used the Depression, Anxiety and Stress Scale (DASS-21), Copenhagen Burnout Inventory (CBI) and Quality of Life (QOL) together with demographic and work-related data. Descriptive statistics and logistic regression analysis were used in the analysis.

Findings:

Four-hundred and seventy midwives responded to the questionnaire (47%). The prevalence of symptoms of depression was 23,3 %, anxiety 12 %, and stress 16,8%. Midwives younger than 40 years reported higher levels of depressive symptoms, anxiety and stress, compared to their older counterparts. Clinical midwives without leadership position reported more depressive symptoms (p 0.009), Midwives with shorter work experience than 10 years showed higher levels of stress (p 0.000). The factors most strongly associated with symptoms of depression were personal burnout (OR 7.79) and quality of life (OR 0.34). The factors strongest associated with symptoms of anxiety were work burnout (OR 3.73) and personal burnout (OR 4.8). The factors strongest associated with stress were quality of life (OR 0.32), personal burnout (OR 3.89), and work burnout (OR 3.76).

Conclusion:

The study showed that Swedish midwives experience symptoms of depression, anxiety and stress. Symptoms of burnout was associated with all aspects of mental health, while high quality of life was protective. These findings are relevant to take into consideration in the work environment for Swedish midwives in order to make midwives stay in the profession.

P59**Identifying and improving tailored care interventions for vulnerable pregnant women**

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Background:

In the north of the Netherlands many pregnant women have a low socioeconomic status (SES, 36%) and other risk factors for pregnancy complications (obesity, smoking, alcohol). As a result, they are more at risk to develop perinatal mortality and morbidity.

Many interventions are developed and implemented for vulnerable pregnant woman. However, an evaluation of suitability and outcomes of these interventions is lacking in many cases. Furthermore, results about the implementation and effectiveness of interventions for vulnerable women in other parts of the Netherlands cannot simply be adopted to the northern region because characteristics and the social context of vulnerable women differ. By involving pregnant women and by understanding the context in which she and her partner live, it is possible to adjust interventions that permeate the real needs of this group. Participation of the target population in decision making in health care, and in our study as co-researchers, is essential because this has been associated with improved health care outcomes.

Method:

The aim of our study is to improve implementation of pregnancy interventions for vulnerable women and with that to improve perinatal and maternal health by:

A. Exploring the interventions directed to improve pregnancy outcomes for vulnerable pregnant women in the north of the Netherlands, and assessing the implementation stage of these interventions using the Measurement Instrument for Determinants of Innovations (MIDI). By using qualitative research, facilitators and barriers regarding the implementation of these interventions will be inventoried,

B. Improving the stage of implementation and effectiveness of at least one intervention using a Participatory Action Research (PAR) design in a learning community.

Findings:

The project starts in January 2019. We will present the outline of our study and share our experiences interactively.

Conclusion:

The generated knowledge should lead to a more effective implementation of interventions and with that improve perinatal and maternal health.

P60

The influence of maternal and fetal anthropometric parameters on the delivery method

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Background:

At the present time, in Slovakia, we can meet increasing numbers of C-sections, medically induced deliveries, and the use of vacuum extractions and forceps during deliveries. This phenomenon inspired us to do a pilot study focused on the analysis of the impact of the anthropometric measurements of women who have decided vaginal delivery, and the anthropometric data of their babies on performed methods of childbirth. The aim of the study was to analyze and verify the influence of the anthropometric measurements of women before conception and childbirth and fetal anthropometry on the delivery method.

Method:

We analyzed anthropometric data of 172 women and 172 newborns that had been born in January 2018 in the First Private Hospital in Košice-Šaca. We used the females' and newborns' health records as a source. The data were statistically analyzed by the Kruskal-Wallis test.

Findings:

We found out a statistically significant correlation between the method of delivery and the maternal weight before pregnancy, bitrochanteric diameter, birth weight, and newborn length, newborn's head circumference and biparietal diameter of the foetus' head.

Conclusion:

We can conclude that our research sample shows the dependence of the delivery method on the maternal and fetal anthropometric parameters. Therefore, the best way how midwives at the delivery rooms can predict the delivery method is important to have the parameters measured and recorded.

P61

A known midwife can make a difference for women with fear of childbirth- a pilot study of birth outcome and experience of intrapartum care

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Background:

There is evidence that continuity of midwifery care is beneficial to women. Women with fear of childbirth in Sweden are offered counselling during pregnancy, but receiving care from a known midwife during labour is unusual, despite its effects in reducing interventions and increase satisfaction. The aim of this pilot study was to describe and compare birth outcome and experience of intrapartum care in women with fear of birth, referred to counselling, who either received labour care from a midwife they previously had met during the counselling visits or standard care.

Method:

A pilot study of 70 women referred to counselling during pregnancy due to fear of birth and where the counselling midwife, when possible, also assisted during labour and birth.

Findings:

Having a known midwife during labour and birth had a positive impact on fearful women's birth experience and their perception of pain, but there was no difference in onset of labour or mode of birth. Six out of ten items in intrapartum care was perceived as deficient. Women who received care from a known midwife experienced better care with regards to information, participation in decision making and perception of control.

Conclusion:

Given the higher proportion of a positive birth experience found in women who had a known midwife, it is time to really consider the Swedish system overall and provide evidence based care with known midwives. Further research would need to randomize fearful women to counselling or continuity of care to determine what the contribution of each model is to reducing fear.

P62

Solo mothers - How to support them during pregnancy and prepare them for childbirth and parenthood

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Background:

The amount of children born to solo mothers, women actively choosing to become single mothers, is increasing. Little is known about solo mothers' requirement during pregnancy, childbirth and the postnatal period. They might need another kind of support and care compared to women living in a relationship.

This project aims on gaining knowledge on solo mother's requirements during this life period and develop an antenatal package to support them.

Method:

The chosen research design is Participatory Design with the purpose of involving the participants in designing an antenatal package. The study is divided into three phases. First solo mother's requirements during the pregnancy, the childbirth and the postnatal period are explored, second a "solution" will be developed and third the "solution" will be evaluated.

The presentation will focus on the first phase of the study. We started to include participants January 2018. The study takes place in Denmark and includes women with a singleton pregnancy who actively chose to become single mothers without a partner before the pregnancy referred to the Obstetric Department at Kolding Hospital, Odense University hospital, or Rigshospitalet.

A group of 10-12 women are included in early pregnancy and a group of 10-12 women are included in late pregnancy. Individually interviews based on an open interview guide are conducted in gestational week 16-17 and 26-27 in the first group. In the second group interviews takes place in gestational week 36-37 and 5-6 weeks post-partum. The data analysis will be inspired by systematic text condensation originated in Giorgi's descriptive phenomenological method.

Findings:

The study is still ongoing.

Conclusion:

The study is still ongoing.

P63

Exploring women's views of labour pain: a collaborative research approach

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Background:

Labour pain has largely been defined in midwifery or medical terms. Although some midwives have sought to work with pain, the prevailing medical approach is that labour pain should be relieved and that this is a priority for women. However, recent research has found that women describe a complex relationship with labour pain that includes

accepting and welcoming this pain. While pain relief is an important option, particularly in difficult labours, its routine use comes with side-effects that can affect labour, the newborn, and bonding and breastfeeding behaviours. Conversely, childbirth pain can be associated with positive hormonal interactions, joy and euphoria, and as a way of recreating the self-as-mother.

Aim: To explore women's views of labour pain in a collaborative research approach.

Method:

Taking the concepts of salutogenesis and humanisation of birth as a theoretical foundation, ideas about positive labour pain were discussed and shared by the researchers and the participants in a series of focus group interviews. These were thematically analysed using the four steps of initialisation, construction, rectification and finalisation.

Findings:

This poster will present the emerging findings of this research.

Conclusion:

This complex approach that women have towards labour pain as something they might fear, but also accept, expect and even welcome, is a new and underexplored area of research that could provide a novel way to improve women's experience of labour, decrease intervention and enhance maternal-infant bonding. This research has the potential to change the way that society, health care practitioners and women themselves, approach the pain of labour and birth.

P64

Newly qualified midwives' experiences in primary midwifery care in the Netherlands

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Background:

In the Netherlands, newly qualified midwives (NQMs) are responsible for providing care to their clients. Before graduation, NQMs work in practice under supervision from an experienced midwife. NQMs work on their own; formal support programs in the Netherlands do not exist. In this study we identified perceived job demands, job and personal resources by NQMs, who work in primary midwifery care.

Method:

A qualitative study with semi-structured group interviews was conducted with NQMs, who worked less than three years in primary midwifery care in 2016.

Findings:

Five focus group interviews were held. Interviews were transcribed and analyzed thematically by using the different characteristics of the Job Demands Resources model. Working as a locum midwife is highly demanding, due to a large workload, requirement to work in different practices, and a lack of job security, next to decision-making and adapting to different community protocols and collaboration in different practices. Important job resources were working with clients and working autonomously. Support from colleagues and peers were perceived as important, although colleagues were also experienced as a demand, due to their dual role as colleagues and employers. Setting strict boundaries, flexibility and a sense of perspective were seen as personal resources, whereas perfectionism and the need to prove oneself were perceived as personal demands.

Conclusion:

In primary care, Dutch NQMs usually work as locum midwives. They tend to work in different practices, which requires working with different client populations, but also adapting to different local working arrangements. NQMs lack adequate support from experienced colleagues for clinical decision-making; peers are the main support NQMs rely on. Building an adequate support system by having experienced midwives available as mentors, may help NQMs finding balance between work and private life. Furthermore, training and coaching of NQMs may help them become aware of their personal resources and demands.

P65

Risk perception and influence on decision-making of obstetric staff in Germany - a study design

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Background:

In the past decades the social perception of risks has been changing, thus leading to the term 'risk society' as a sociological concept. Simultaneous the concept of risk and risk management became a central principle in maternity care. On international level studies already explore whether a higher risk perception of health care professionals is influencing their decision-making and the care of women in labour leading to more interventions, but so far data for Germany are missing.

Method:

The aim of this study is to assess whether personal and systemic factors of midwives (age, gender, occupational years, the level of professional qualification and working place, level of care) have an impact on the risk perception of midwives in Germany. Hence, focus group interviews will be conducted to gain insights what midwives perceive as a 'risk' or as 'risky situations' during labour, in order to conceptualize risk perception of midwives in Germany. These findings shall be used to construct case vignettes to conduct a questionnaire survey exploring the influence of different risk perceptions on the clinical decision-making of midwives.

Findings:

Basically it is expected to provide insights what health professionals in Germany perceive as risks and what influence this risk perception has on their performance.

Conclusion:

To promote physiological, low-intervention birth is one of the German national health goals. We assume that risk perception of obstetric staff directly influences decision-making processes and - as a result - an inadequate care of mother and child. Therefore it might be crucial to address the risk perception of obstetric staff.

P66

Demanding and rewarding - continuity of care in a Swedish rural area

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Background:

Continuity of care is an approach and a cornerstone in midwifery and women-centered care. However, in Sweden antenatal care and care during childbirth are organized separately which means that women give birth in hospital assisted by a midwife they never met before. A local project in a mid-Sweden region started 2017. Pregnant women were invited to take part when booking the first antenatal visit. The women recruited to the project were assigned a primary responsible midwife who carries out all visits during pregnancy. Women and their partners' meet the other three midwives in the project at any of the visits during pregnancy or in connection with the parental group meetings held monthly. At the start of labour, the parents contact the midwife on-call. This might be the primary midwife or any of the other midwives. The aim of the study was to describe the experience of the midwives.

Method:

A qualitative interview study using thematic analysis. Interviews were undertaken with the midwives in the project. Altogether, six interviews were held individually and group wise.

Findings:

Preliminary analysis of midwives' experiences so far, half way through the project, show that the work with implementing continuity of care has been demanding and rewarding. Demanding because the midwives made all practical arrangements with facilities and new routines while the project started. Another challenge was working in antenatal care since all but one midwife had previously been working at the labour ward now closing down at local hospital. Still, being part of the project was considered fulfilling and rewarding. The relation that come about during the months of pregnancy is most beneficial for all involved. Women's' concerns relating to labour and birth are well taken care of.

Conclusion:

Implementing continuity of care in maternity care is promoted by careful planning and preparation

P67

The prevalence of sick leave: Reasons and associated predictors - A survey among employed pregnant women

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Background:

Sick leave among pregnant women is a frequently discussed issue in the Scandinavian countries, as two out of three pregnant women spent an average of 47–73 days on sick leave during their pregnancies. The number has increased over recent decades. This leads to a significant socio-economic burden as more than 80% of the Danish women form part of the workforce. Only limited research exists regarding the reasons for sick leave. We aimed to investigate the prevalence of sick leave and self-reported reasons given for sick leave during pregnancy. Furthermore, we aimed to estimate the frequency and possible predictors of long-term sick leave among pregnant women.

Method:

Data from 508 employed pregnant women seeking antenatal care was collected by questionnaires from August 2015 to March 2016. The questionnaires, which were filled in at 20 and 32 weeks of gestation, provided information on maternal characteristics, the number of days spent on sick leave and the associated reasons.

Findings:

The prevalence of sick leave was 56% of employed pregnant women in the first 32 weeks of gestation and more than one in four reported long-term sick leave (> 20 days, continuous or intermittent). Low back pain was the reason most frequently stated. Fewer than one in ten stated that their sick leave was due to work-related conditions. Positive predictors of long-term sick leave were multiparity, pre-pregnancy low back pain and mental disease, while an advanced degree education was a negative predictor.

Conclusion:

The prevalence of sick leave was 56% in the first 32 weeks of gestation and more than one in four women reported long-term sick leave. The majority of reasons for sick leave were pregnancy-related and low back pain was the most frequently given reason.

P68

Experiences of participation in group-based supervised exercise among pregnant danish women at risk of depression - A qualitative interview study

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Background:

Objective: To explore experiences with group-based supervised exercise during pregnancy in women at risk of depression.

Method:

Design: The study is a qualitative explorative study based on semi-structured individual in-depth interviews and data is analyzed by means of thematic analysis, Braun/Clark's theory.

Setting: The study was conducted in the context of a RCT entitled *Effect of supervised exercise in groups on psychological well-being among pregnant women at risk of depression (the EWE-study): a randomized controlled trial* (Broberg 2017).

Participants: Women having a current diagnosis of depression (defined as women referred to antidepressants) and/or a score ≤ 50 on the five-item World Health Organization Well-being were invited. All participants were allocated to the intervention group in the EWE-study.

Findings:

The overarching theme was found to be *Vulnerable yet strong* which entailed three main themes: *From judging the body to feeling it*, *A "we" is created* and *Taking responsibility and succeeding*.

Conclusion:

The data analysis has just been completed and there is not yet a conclusion.

P69

'It makes you feel like you are not alone': Expectant first-time mothers' experiences of social support within the social network, when preparing for childbirth and parenting

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Background:

Becoming a mother is one of the biggest transitions in a woman's life. The transition to motherhood starts with her first pregnancy. Expectant first-time mothers can experience the transition to motherhood as overwhelming and chaotic, with mixed feelings. Therefore, this transition should be accompanied by opportunities to receive support. Expectant mothers who receive satisfactory social support are at less risk of pre-term birth and are less affected by mental health problems, such as depression or anxiety, during pregnancy. For professionals, it is essential that they understand expectant mothers' need for and experiences of social support. This study aimed to explore expectant first-time mothers' experiences of social support within the social network, when preparing for childbirth and parenting.

Method:

The study had a qualitative design using semi-structured interviews. Fifteen expectant first-time mothers were interviewed during gestational weeks 36–38. Data were analysed using content analysis.

Findings:

Social support could strengthen the relationship between an expectant first-time mother and her partner. For this, among other things, both partners needed to participate in the preparations for childbirth and parenting. Social support also contributed to feelings of recognition and belonging when the mothers could share experiences with others, especially other expectant first-time parents. When the social support included the sharing of adequate information, it facilitated a sense of understanding childbirth and parenting. Altogether, social support within the social network facilitated feelings of calm and security about childbirth and parenting.

Conclusion:

Expectant first-time mothers use social contacts to prepare for childbirth and parenting, and social support within the social network, can facilitate their experience of a strengthened relationship with their partner and feelings of calm and security about childbirth and parenting.

P70

FINDING YOUR PROFESSIONAL IDENTITY AS A STUDENT IN MIDWIFERY- the Impact of Reflective Practice-based Learning

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Background:

How can we refine and qualify students' formation of professional identity through reflective practice-based learning?
– What matters?

Method:

An abductive process inspired by Design-Based Research. Alongside a literature study, empirical data was generated through interviews, workshops and learning portfolios.

Findings:

Professional identity in terms of consistency and continuity - (a narrative about me as the good professional midwife) - is still being challenged and has to be recreated during the education. The narrative is in the start of the training program especially influenced by the student's biographical narratives and centered around themes such as the use of oneself in professional settings, power and authority in the professional role, as well as how to use theory in understanding the area of practice. Later it is particularly affected by 'trigger events'. At the end of the education the narrative is influenced by the student's expectations and ideals in relation to professional practice - the ambivalence of the profession's tools and concerns about the opportunities fulfilling the profession (and own) PROFESSIONAL AND ETHICAL ideals.

Conclusion:

There must be 'rooms' where the student can reflect on, what is experienced important for her in terms of developing professional identity. In these rooms reflection should be supported carefully, so that the student dares to go into it and put herself and her narrative at stake. These reflections should also be supported didactically, to ensure the reflection is professionally well-founded and thus qualified supports the development of professional identity.

P71

Denial and Concealment of Pregnancy - a Need for Awareness in Midwifery Practice

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Background:

In the last decade, one newborn child has been found every year in Denmark, dead or alive, left behind by its parents. Studies has shown that neonaticide and foundlings are connected to denial or concealment of pregnancy. Denial of pregnancy can be a serious phenomenon and is an underestimated problem with several social, psychological and obstetrical consequences for mother and child. In this study, we put focus on denial and concealment of pregnancy in order to define the phenomenon. Also we have analyzed the incidence and consequences for both mother and child in order to strengthen midwives and other professionals awareness of the condition.

Method:

This is a literature study to explain and understand denial and concealment of pregnancy. We have systematically searched the databases Psychinfo, Cinahl, PubMed, Web of Science and Scopus using the search words denial, concealment, pregnancy, neonaticide, foundling, infanticide. Furthermore, we used chain search.

Findings:

We found that the phenomenon is more frequent than anticipated. It is therefore a condition, which all healthcare professionals should be aware of, and that midwives in particular should be prepared to deal with in clinical practice. Denial of pregnancy has severe obstetrical consequences for the mother and the unborn child. The women who deny the pregnancy is a heterogeneous group and are difficult to identify and reach. Most of the literature used in this study is from central Europe, UK, Australia and very little from the Nordic countries. It is therefore not possible to identify whether the frequency in the Nordic countries is comparable to the frequency found in the literature.

Conclusion:

The results of this study should make midwives aware of the frequency and the characteristics of denial and concealment of pregnancy. Future work will focus on the topic in a nordic context, alongside with prevention of the consequences.

P72

Breastmilk Expression for Diabetic Women before Birth

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Background:

Mothers own milk is the recommended source to achieve a metabolic transition for the newborn after delivery. Mothers "self-made" milk is indisputable to prefer. Norway have one of the worlds largest breastfeeding numbers, which requires continuously work. Newborns of women with diabetes has higher risk of not being exclusively breastfed because the delay in lactogenesis II. Often the newborns are given infant formula because of the risk of hypoglycaemia. We know that the use of infant formula gives a lower breastfeeding frequents among mothers. From New Zealand we have information about their introduced practice with antenatal milk expression before labour. This has never been studied in Norway, and international there is limited evidence regarding efficacy. We want to conduct this study to find knowledge-based evidence before introducing a new practice in our maternity ward, starting with mothers with diabetics. We are going to investigate a planned and structured practice with expressing colostrum before labour for mothers with diabetes. Hopefully this will have a positive effect for both mothers and newborns. The colostrum will be used after labour to minimize the use of infant formula when there is a risk of hypoglycaemia in the neonatal period.

Method:

Through a "feasibilitystudy" we have started including pregnant women with medicated treatment diabetes, ongoing over one year. Strength calculation of 50 women. During information and education from week 37 in pregnancy they will be followed in a "intention-to-treat" method. Measured mean outcome is infant formula or not after delivery and if the mothers are breastfeeding or not. A following interview will evaluate their experience from the process and their breastfeeding situation.

Findings:

Data will be conducted from January 2019 until January 2020, and the study are planned to be finished by June 2020.

Conclusion:

Conclusion can not be drawn before all data is conducted.

P73

Group antenatal care in multi-cultural contexts: a study protocol for the Hooyo-project in Sweden

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Background:

Sweden has a stated goal of providing equitable health care for the whole population, which in recent decades has become increasingly diverse. Nevertheless, studies indicate that pregnancy outcomes among immigrant women are suboptimal compared to Swedish-born women's. These disparities point to the need for implementing and evaluating interventions to improve care for immigrant women and families. This study protocol describes the development of the *Hooyo-intervention*, aimed to improve antenatal care for Somali-born women and families giving birth in Sweden.

Method:

An intervention feasibility study, with process evaluation measures incorporated at each stage and outcome evaluation using a historically controlled design. *Phase I* is the preparation phase, including needs assessment and development of contextual understanding. *Phase II* is the intervention development phase and *Phase III* is implementation and evaluation of the intervention using historical controls

Findings:

The ongoing intervention is group antenatal care offered at two sites modified to local needs. From gestational week 20-26, women receive group antenatal care; 8-9 appointments with a midwife during a normal pregnancy with 6-8 women with their partners (or another support person) per group. Each visit includes a 1-hour group session facilitated by two midwives, assisted by a bilingual interpreter and a 15-minute individual appointment with the responsible midwife for pregnancy checks and private questions. Eight childbirth and parenting themes provides a base, but discussing issues and questions raised by the participants is central.

Conclusion:

By emphasising dialogue, a person-centred approach and active participation of women, partners and midwives throughout development and implementation, we strive to develop a relevant, pragmatic and acceptable model of care, which is replicable to other settings with only minor changes. The design being a feasibility study with process and impact evaluation included enables documentation of challenges, successes and adjustments needed along the way.

P74

Exploring women's information needs in pre-admission early labour care

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Background:

Experience, user surveys and current literature all suggests a lack of satisfaction in early labour prior to admission. A website with easy-to-access high-quality relevant information about early labour will be developed, in an effort to encourage women to cope with their labour adequately, and relieve their anxiety, fear and stress. This study is part of a PhD-study with an overall aim to improve early labour care and women's pre-admission early labour experience through developing and testing the effect of an electronic educational intervention. The aim of this sub-study is to explore what information women missed and/or appreciated in early labour and what information women in early labour can benefit from.

Method:

The study is qualitative, using explorative design. A purposive selection of respondents, recruited at child health clinics within 6-12 weeks after delivery has been employed. Only first time mothers who have given birth to one baby

in cephalic lie, ≥ 37 weeks, with a spontaneous start of labour were included. Purposive sampling has been aspired by only including women who stayed at home some part of their early labour. Exclusion criteria included induction of labour, conditions in pregnancy that precluded them from staying at home in early labour and non-Norwegian speaking women.

To this date four focus group-interviews, from four different clinics have been performed. One last focus group-interview will be performed this fall.

Data is being analysed using systematic text condensation.

Findings:

So far, 14 women participated with a varied background in regard country of origin, and socio-economic status.

Themes that seems to be recurrent are:

- A need for credibility in the information
- A need for information about *all the different ways* in which early labour can manifest
- A wish for examples/statistics/someone to compare themselves to
- Duration of early labour
- The need for permission to come to the hospital

Conclusion:

In progress.

P75

Midwifery Students Across Borders

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Background:

In today's era of globalisation, health care professionals provide health care services within their own contexts, but these local contexts may be very diverse. Midwifery education programmes that include internationalisation show improvement in intercultural competences that broadens the midwifery students' clinical competence. In this paper, the aim is to present an online international midwifery course through telecollaboration, to identify how students experienced the course and if they gained the intended international and intercultural competencies.

Method:

The course "Intercultural perspectives on reproductive health" was a joint effort between midwifery programmes at the AVAG Midwifery Academy Amsterdam Groningen in the Netherlands, Kamuzu College of Nursing Blantyre in Malawi and Karolinska Institutet in Sweden. The education compartments consisted of online lectures, peer-to-peer discussions and online group assignments. Students engaged with the course material on an online platform. After the course ended, all students were asked to fill in an online evaluation form which consisted of close-ended and open-ended questions.

Findings:

After intense collaboration of the institutes, the course was carried out between 16 October and 13 November 2017. 54 students signed up for the course (37 from Sweden, 9 from the Netherlands, 8 from Malawi). All students completed the course. The evaluation had a response rate of 78% (n=43), in which 52.5% stated they were (very) satisfied with the general setup of the course. The online lectures were the highest scored component, with 83.8% being (very) satisfied. The discussion forums were scored lowest, with only 37% being (very) satisfied. 81.4% (strongly) agreed that they gained international knowledge and developed intercultural in the course.

Conclusion:

Setting up an online course has its challenges in terms of set up, logistical execution and integration into existing course curricula. However, more than half of the students experienced the course as positive and almost all students gained the intended competencies.

P76

Weaning: a research into the knowledge and practice of young parents in introducing solid food

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Background:

International guidelines advise exclusive breastfeeding up to six months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond. Research shows that young parents experience numerous concerns about feeding their babies. Lack of clarity remains regarding the “best” moment to introduce solid food. This research project aims to discover the current and desirable knowledge, attitude and practice of Belgian mothers, concerning the introduction of solid food during the first year of their baby’s life.

Method:

This descriptive quantitative research aims to discover what mothers know about the ‘first bites’, what questions they have about it, which channels they use to find information and how they experience this information provision. An online questionnaire via Qualtrics was completed by 300 mothers living in Flanders, Belgium. After exclusion 296 results were retained for further analysis using SPSS. Findings of the quantitative research will be used to develop an educational tool for parents.

Findings:

(preliminary results)

Mothers indicated that solid food should be introduced at six months (73%) or at four months (19%). However, some mothers introduced solid food earlier than what they perceived as being the most appropriate age to start. Most confusion existed on the amount of solid food which should be given. Information was mainly searched or provided at 2-3 months postpartum (42%), at 4 months postpartum (19%) or during pregnancy (both 19%). The main information channels were oral and digital. The complete results will be presented at the congress.

Conclusion:

The educational tool will preferably be a digital tool, targeting pregnant women and mothers at 2-4 months postpartum. It will clarify ambiguities regarding the introduction of solid food during the first year of life, such as the amount of food which is to be given and the best age to start.

P77

Midwives' experiences of providing Sexual and Reproductive Health Care in Humanitarian Settings- A qualitative study in Cox Bazar, Bangladesh.

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Background:

Inadequate access to Sexual and Reproductive Health (SRH) Care contributes to maternal morbidity and mortality in low resource settings and especially in humanitarian settings such as Cox Bazar in Bangladesh. More than 1.3 million Rohingya refugees are affected and an estimated 316,000 women of reproductive age sheltering in Cox-Bazar after they have escaped from <http://www.fao.org/emergencies/countries/detail/en/c/326208/>. They live in spontaneous overcrowded settlements, the humanitarian needs are considerable and women are at high risk of gender-based and sexual violence. Around 64,000 women are pregnant and 2500 experience complications and their access to SRH care is limited. There is a lack of data on the quality of care women receive during early and late pregnancy in humanitarian settings and there is a need to provide scientific evidence to evaluate the effectiveness of SRH interventions delivered in humanitarian crises.

The aim of this study was to explore midwives' experiences of providing Sexual and Reproductive Health Care in order to identify successful strategies for increasing women's access to quality of care in early and late pregnancy in humanitarian crisis.

Method:

An inductive qualitative design was applied and data collected through In-depth interviews and analyses by inductive content analysis. A pre-defined topic guideline was constructed for the IDI allowing the midwives to share their experiences and probe in to issues of significance for the research questions. The interviews were performed on a place and time chosen by the interviewee. Informants are midwives (n= 15) engaged in providing sexual and reproductive health care in Cox Bazar, Bangladesh. The recorded IDIs have been transcribed along with the notes taken during the interviews. The transcripts will be analysed using inductive Content Analysis where emerging codes will be discussed and re-evaluated to reach consensus and codes divided into categories and furthermore the identification of a theme.

Findings:

Analyses in progress.

Conclusion:

In progress.

P78

Midwifery practice in home-based postnatal care

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Background:

Postnatal home visits following childbirth is an important health service in a period of transition for young families. In Germany, midwives are the primary healthcare care givers during the postnatal period. They support mothers and their families up to twelve weeks after birth and beyond. However, the experiences and perceptions of midwives during their work have not been sufficiently researched. This study aimed to explore views and care approaches from the midwives' perspective.

Method:

This qualitative study was based on the data collected from semi-structured interviews with 28 midwives. The data were collected during two rounds between 2013 and 2015. Participants were included if they had provided community-based postnatal care for a minimum of two years. Reconstructive methods such as qualitative content analysis and hermeneutic interpretation were used to analyse the material. Ethical approval was obtained by the Ethics Committee of the authorized university.

Findings:

Results: The results indicate a heterogeneous field of postnatal care requiring a midwife's broad expertise. In addition to specific care concepts, maternal and child health care, the midwife-woman relationship, the involvement of family support and interdisciplinary networking were analysed. Basic elements of midwifery care are support and monitoring of the mother's physiological change processes as well as the child's development. This leads to various professional activities such as diagnostic and health-related therapeutic care, psychosocial support and counseling can be derived.

Conclusion:

Our study demonstrates a comprehensive description of midwifery practice after childbirth. An specifically defined healthcare assignment and evidence-based guidelines could help support the midwives in utilizing their resources to enable optimum postnatal care for women and their families.

P79

Improving care for the primipara

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Background:

Gothenburg has one of northern Europe's busiest labor and delivery wards, with 10 000 births annually. For the past decades the cesarean section rates have increased. In 2014 Sahlgrenska university hospital introduced Valuebased healthcare, and one of the target areas of improvement was to reduce the cesarean section rate for the Robson 1 group, meaning the primipara with spontaneous onset of labor, head down position, and full term. About 3500 women belong to this category each year.

Method:

The clinic introduced professional support throughout the active phase of labor. Workshops were carried out for the entire staff showing massage techniques, labor positions, spinning babies concept, and empowering motivating conversation skills. Since research shows that professional support reduces the use of epidurals and cesarean sections, and increase patient satisfaction this was one important step. We also created the Timeout model in prolonged births. This means that when there has been no progress for three hours, the team is gathered, consisting of midwife, head midwife, obstetrician, nurse, and the parents. The birth is discussed with the birth team and the parents, and a plan how to make the birth progress is made and carried out, and then evaluated.

Findings:

Since starting our project in 2014, the cesarean section rate has decreased from 9,3% to 3,5%.

Patient evaluation questionnaires show improved figures for feeling safe during labor and of the support they received

Conclusion:

It is possible to achieve low cesarean section rates for the primipara, and improving birth experience. It has also made the staff focus on teamwork and we have noticed a fantastic enthusiasm in most birthworkers! We hope our work will inspire other maternity clinics to join in this important and rewarding field of obstetrics.

P80

Membrane sweeping, an unnecessary or beneficial intervention?

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Background:

Post-term pregnancy is associated with an increased maternal and neonatal complications. Therefore, Swedish Society of Obstetrics and Gynecology (SFOG) recommends sweeping of the membranes as an intervention at the Swedish health centers from 41+0 weeks of pregnancy, to initiate labour and to reduce the need for induction of labor and prevent post-term pregnancies.

Method:

A quantitative retrospective journal review was used as a method. In the data collection, 124 journals were included from the Obstetrix journal system. Data analysis was processed and analyzed in SPSS, using Pearson's Chi. -test and Student's t-test.

Findings:

The result showed that the time from membrane sweeping to spontaneous onset of labour was approximately 89 hours for the test group. By Pearson's Chi. -test, statistically significantly increased incidence of induction of labour ($P=0,012$) and incidence of post term pregnancies ($P=0,002$) in the test group were found in comparison with the control group.

Conclusion:

Membrane sweeping at 41+0 weeks does not reduce the need for induction of labour and the incidence of post term pregnancies.

P82

Midwifery research engaging science and practice - Insights from The Future of Labour Evaluation Café

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Background:

The current situation of health care for women during pregnancy and childbirth in Germany is characterized by an acute scarcity of midwifery workforce in labor wards and out-of-hospital practice. This scarcity results in unmet obstetric and emotional needs, an increase in critical incidents and unnecessary interventions as well as in dissatisfaction, burn-out or "coolout" of health care professionals.

Exploring such complex situations and aiming to induce change processes requires a transformative research paradigm that bridges the gap between science and practice through consumer participation and social interaction.

Method:

The Future of Labour-Evaluation Café (FoLEC) is a participatory research instrument designed for developing change processes concerning care around childbirth through the narratives of care-givers and parents alike. It provides a communicative space in which various health care professionals, parents, politicians and academic researchers exchange their respective experiences. On this basis they develop their wishes and joint visions regarding the future of labour in the double sense of the term.

Findings:

The Future of Labour-Evaluation Café is a yet ongoing research project. Preliminary findings demonstrate the great interest of all participants to recognize, absorb, and act on the stories of others. Addressing the need of caregivers and those cared for to voice their experience, to be heard and valued, FoLECs open up a view to the transformative power of narrative to develop care practices fit for the future.

Conclusion:

The Future of Labour-Evaluation Café proposes a valuable research method for midwifery science across the disciplinary borders of labour research, futurology and gender studies. Putting women/parents and professionals as equal partners center stage, FoLEC work to activate resources for common engagement towards transformative processes; it has democratic potential within the hierarchical structures of obstetrics.

P83

Generation of reliable workforce data - asking the right questions

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Background:

In Germany, there is no health professional register for midwives to generate workforce data in regular so far. Only small data on the number of midwives and their services exists. Data is needed though in order to secure an adequate number of practicing midwives and thus midwifery care for every women in the future. The aim of the study is to generate reliable workforce data.

Method:

A quantitative cross sectional study design was chosen to ask practicing and non-practicing midwives living and/or working in the federal state North Rhine-Westphalia (NRW). The questionnaire focuses on work field, workload, professional wellbeing and descriptive data. Validated instruments measure burnout and perceptions of empowerment in midwifery. Midwifery associations, clinics, birth centers and health authorities as multipliers represent access to the field. About 4.500 questionnaires were sent including a prepaid envelop. All midwives had the possibility to choose either paper-pencil or online survey. Data was collected between February and July 2018 within the research project midwifery care in North Rhine-Westphalia (HebAB.NRW), funded by the Landeszentrum Gesundheit (LZG.NRW). The ethic committee of the Hochschule fuer Gesundheit Bochum obtained ethical approval.

Findings:

Without a register, it is difficult to identify and contact all practicing midwives. Midwives work in different settings (freelanced and/or employed) and not every midwife is member of a midwifery association. Thus, in order to reach as many midwives as possible, we chose a multistage recruitment strategy. Due to an unknown population, the responding rate is uncertain.

Conclusion:

To provide appropriate midwifery care, the survey identifies and reviews comprehensive data. Results indicate a recommended number of midwives to guarantee appropriate care for childbearing women. With the survey, we intend to identify workplace-related aspects of midwives that need improvement in order to retain jobs.

P84

FertiQoL Questionnaire on quality of life related to fertility problems Testing the Icelandic version

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Background:

About one in six couples cope with infertility. Studies have shown that infertility and the experience of fertility treatments can significantly affect couples life and well-being. The FertiQoL questionnaire was designed in 2002 as an international tool for measuring the quality of life of women and men who suffer from infertility or who receive fertility treatments. The questionnaire that has been translated into more than forty languages “◆◆” consists of thirty-six questions.

Method:

The aim was to test the Icelandic translation of the FertiQoL questionnaire. The background and the translation process will be introduced as well as the results of testing the Icelandic version. The questionnaire was submitted to people going through fertility treatments at *The IVF-Clinic* in Reykjavik during the time of April 18th 2017 to May 8th 2017. A convenience sample was used where the research was introduced and a questionnaire submitted to couples coming for a fertility treatment at the clinic. The response rate was 95% including 18 couples

Findings:

The reliability factor Cronbach's alpha was used to check the reliability and internal consistency of the FertiQoL questionnaire. In this study, Cronbach's alpha 0.937 was considered to be reliable and showed good internal consistency of the questionnaire

Conclusion:

The results of the study indicated that the Icelandic translation of the questionnaire FertiQoL is good, and the results also indicate that the Icelandic version FertiQoL is reliable.

P85

The effect of light versus strict activity restriction in threatened preterm deliveries at gestational week 22-33 - a randomised controlled study - The ELISTAR study

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Background:

Maternal activity restriction (AR) is commonly recommended to prevent preterm delivery. The treatment effect of AR is unknown, as only few studies of low quality and with insufficient results has examined the effect. However, the adverse effects of AR are well documented and cause increased risk of a number of both physical and psychological implications for both the women and their families.

Aim To examine the effect of light versus strict AR in threatened preterm delivery.

Hypothesis No difference in the number of days from randomisation to delivery regardless of the degree of AR (light versus strict).

Method:

A randomised controlled multicentre trial (RCT) will include 310 pregnant women in threatened preterm delivery between gestational ages 22-33 weeks in order to detect a minimum difference between the groups of 7 days or more. Participants give their informed consent and will be randomised to either an intervention of light AR (3 hours daily physical rest and only limited, few household chores are permitted) or to a control group of conventional strict AR (physical rest the entire day and no household chores are permitted). The participants are monitored by an accelerometric device as well as by a project midwife twice weekly.

Findings:

Status The project is in the planning phase with testing of the accelerometric device, building of the eCRF etc. The study project is expected to start by medio 2019 as a pilot RCT in order to demonstrate feasibility and ethical soundness of the main study. The project is anchored at Nordsjællands Hospital and all Danish obstetric departments with neonatal services will be invited to participate.

Conclusion:

The project is still in the planning phase.

P86

FIRST TIME FATHERS' EXPERIENCE OF SUPPORT FROM MIDWIVES IN MATERNITY CLINICS - AN INTERVIEW STUDY

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, Sweden

Background:

Research shows that first-time fathers want to take part in preparation for birth and parenthood but they describe being excluded by health professionals.

Aim: The aim of this study was to illustrate first-time fathers' experiences of support from midwives in maternity clinics as a step in the validation of the "The Father Perceived-Professional-Support" (The FaPPS) scale.

Method:

A qualitative content analysis with an inductive and deductive approach was used, 7 first-time fathers were strategically selected and interviewed. In the inductive part following open question was asked; "How did you perceive the support from the antenatal midwife/midwives?". In the deductive part, the fathers were asked to respond to the FaPPS scale, in order to receive their thoughts and understanding of the scale, inspired by the "Think-aloud" method.

Findings:

The inductive results showed two main-categories; *Experience of not knowing what support they needed* and *Experience of being excluded*. The fathers found support from other fathers in parental education classes, but they lack time to discuss. Overall it seems as if the fathers answered both from their own perspective and from the mothers' perspective. This was not evident in the deductive results. The FaPPs scale should therefore include; *Professionals' ability to strengthen social support from other first-time fathers* and *Professionals' ability to offer support to the mother*.

Conclusion:

Conclusion and clinical implications: The Fathers experienced exclusion both by themselves and also by midwives. Midwives should offer both parents the opportunity to pose questions. It is important for expectant fathers that time for discussion is planned in parental education classes. The FaPPS scale is useful but needs further development. Parts of our result are in line with earlier research, since decades, therefore it is necessary to focus more of support for fathers.

P87

Description of Midwifery Students' Reflection Skills

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Background:

Description of the graduating midwives' professional competence with all the phases of the process has been produced nationally. The purpose was to determine the national quality standards for midwives as well as facilitate the comparison of professional competence considering the international EQF (European Qualifications Framework) and the NQF (National Qualifications Framework) which is based on the EQF level 6. The midwifery students at University of Applied Science have blogs in Savonia University of Applied Science in onedrive O365 during their education. The blogs are a tool for developing know-how and reflection. Students write in their blogs reflections during half an year.

Method:

In this research was considered, how midwife students describe theory of knowledge and how they use it in their first midwifery practice. The contents are Ethical issues, Customership in midwifery, Midwives as promoters of sexual and reproductive health and as clinical experts and Development and management of midwifery. In this research was analysed twelve's midwifery student's half an year reflection. The analysis was made using content analysis.

Findings:

The results pronounced ethical issues and practical competences in midwifery area. In reflection was noticed the meaning of strong theory knowledge and it's applying in practice was important and challenging. Students found client's counselling very meaningful. In clinical competence was pronounced handsets of midwifery. Students appreciated the importance of Evidence Based Knowledge. Some students found very important decision making and how to develop it.

Conclusion:

This was the first step for analysis of midwives' half an year reflection. In the future we are going to view the same midwifery group's reflection. The meaningful is how the content of reflection develops during to the one year following time

P88

The psychosocial experiences of male childlessness and its relevance to Midwifery practice: A qualitative study.

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Background:

At a glance male childlessness may not seem relevant to midwifery practice. However, the psychosocial implications of changing perceptions of 'reproduction' and 'parenting' necessitate the exploration of how these concepts are understood by individuals who do not have biological offspring. The increase use of Assisted Reproductive Therapies (ART) such as IVF, and same-sex couples having children, are examples of when midwives may need to consider the psychosocial impact of 'childlessness' for both men and women. Yet until recent years, the sole focus

of the reproductive space has been on women, with the number of studies exploring men's perspectives of how 'childlessness' and 'reproduction' are understood remains small. The specific aims of this qualitative study were to explore and increase awareness of lived experiences of men who have not produced offspring and examine discourse that influences meaning-making for childless men. As pronatalistic ideology inextricably links reproduction with biology, questions are raised of the psychosocial wellbeing of men who have not produced offspring, and how a sense of being reproductive in other ways is developed.

Method:

Twenty-three Australian men, heterosexual/homosexual, married/single, aged over 50 years and who were not aware of having biological offspring were recruited and invited to participate in semi-structured interviews. As human experience is multi-dimensional, to gain more than one perspective, two forms of qualitative analyses were applied to the data - Interpretative Phenomenological Analysis (IPA) and Foucauldian Discourse Analysis (FDA).

Findings:

The phenomenon of childlessness is complex. Men's experiences of 'having' children, without a biological relationship, are diverse - ranging from profound grief and depression, a lingering sadness, experiences of relationship difficulties and social judgement, to levels of acceptance and relief associated with fate, risk, avoidance, and finding other ways to 'parent' and feel 'reproductive'.

Conclusion:

The psychosocial wellbeing of 'biologically' childless men has implications in many areas of midwifery practice.

Workshops

W-01

The rebozo technique - how to perform and why? Introduction and hands-on workshop

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Background:

Following up on our poster presentation at the NJK 2016 in Sweden, we suggest to perform an interactive workshop centered around the rebozo technique.

The rebozo technique is a noninvasive, low practice technique, originating from Central America where it has been used for centuries. It involves gentle movements with the woman's hips from side to side in different positions carried out with a scarf. The technique is carried out during pregnancy or labour either by a support person or the midwife for pain relief and relaxation of the pelvis muscles. The interest and use among Danish midwives have been increasing during the last 5-10 years and is currently widely used.

Method:

A thorough introduction and supervision is essential for the midwives to include the rebozo technique as a real tool in their clinical practice and peer-to-peer training works well in order to get insights into the general principles. Hence, the workshop will consist of practical exercises (two and two together) supervised in smaller groups by an experienced midwife. Questions to be answered in the work-shop will be:

What is the purpose of the technique?

When is it beneficial to carry it out?

How to carry out the technique correctly? -positions and technique

Findings:

Based on our qualitative study from 2016 the laboring women see the technique as an inoffensive effort towards a natural birth including mutual involvement and psychological support. The results indicate that the rebozo technique to some extent affect psychological wellbeing during birth and potentially influence the progress of labour positively. As such it is important to bring across the knowledge of the technique to midwives in a practical way.

Conclusion:

Participants take home a short theoretical introduction to the rebozo technique and hands-on exercises of carrying out the rebozo in clinical practice.

W-02

BLUBB: An interprofessional contract teaching to reduce perineal trauma and to increase the level of knowledge of pelvic floor anatomy and repair of perineal trauma

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Background:

It is estimated that 25% of all births in Sweden take place in the Stockholm County. When compared to other regions in Sweden, women in Stockholm more often sustain severe perineal trauma. This fact has been highlighted by the professions involved, by women and by media.

The aim of this interprofessional contract teaching is to teach woman centred and evidence based prevention.

Furthermore, the aim is that the course participants should achieve a deeper understanding of pelvic floor anatomy in order to apply this when repairing perineal trauma.

Method:

In 2017 the Swedish government provided funding with the specific aim of reducing severe perineal trauma. In Stockholm, an interprofessional contract teaching was started at the Karolinska Institute (KI).

Findings:

The BLUBB project started in March 2017. In December 2018, 415 midwives and doctors will have attended. Severe perineal trauma has decreased in the region from 3.9% 2017 to 3.0% in august 2018. The course contributes to reducing severe perineal trauma in spontaneous births, where the prevalence has decreased from 3.2% to 2.5%, while rates remain mostly unchanged in instrumental deliveries (13.3% to 11.3%).

Conclusion:

During this workshop we will discuss the advantages of a course where all maternity wards in a region participate.

We will use filmed material to discuss the following topics:

Anatomy of the pelvic floor and functional repair of perineal trauma

Prevention of perineal trauma

How to apply the concept of prevention of perineal trauma to instrumental births and why this seems to be more difficult to achieve

Success stories: Södertälje hospital has reduced the prevalence of severe perineal trauma in instrumental births from 15% to 4.6%. Karolinska University hospital Solna has reduced severe perineal trauma in spontaneous births from 3.6% to 2.2% by implementing the preventive strategies taught in the course.

W-03

EMMA - Enhanced Maternity care for Migrant Families: Research to Action

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Background:

Migrant women's increased risk of adverse pregnancy outcomes and poorer experiences of maternity care are well documented, yet few initiatives have been undertaken to meet their specific needs in maternity care.

The overall aim with Emma is to improve the functioning and sustainability of maternity care systems for migrant women and to reduce health inequalities in Sweden by investigating the specific needs of migrant women and facilitating the implementation of effective maternity care models for them. The Emma program addresses all stages of maternity care provision from pregnancy to the postpartum checkup.

Method:

Using epidemiological data, qualitative interviews, feasibility studies and experimental research, Emma will explore and disseminate knowledge about effective, acceptable, high quality and sustainable maternity care models for migrant families. Context-specific models will be investigated and described in combination with an action plan for how to disseminate and implement evidence based maternity care for vulnerable groups.

Findings:

During the symposium we will give a background to the research field and present findings from all stages of maternity care provision from pregnancy to the postpartum checkup: Adverse neonatal outcomes, migration and country of first birth: a population-based study in Norway; Somali-speaking women's experiences of antenatal care: a qualitative study; Preliminary findings a randomised controlled trial of Community-Based Doula support for

migrant women giving birth in Stockholm, Sweden; The experiences of a 'welcome' visit to the hospital prior to birth for non-Swedish-speaking women will be presented.

Conclusion:

The Emma program develops and tests new models of care to improve antenatal, intrapartum and postpartum care experiences for migrant women. New knowledge emerging from all the studies will be used to recommend improvements to the perinatal care migrant women receive across the whole spectrum of maternity care services. A full-scale model for maternity care for a vulnerable groups of women has not been presented before.

W-04

'Midwifery educators crossing borders' - Capacity-building of midwifery education in low resource setting

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Background:

In most low-resource settings maternal and child mortality and morbidity are major public health concerns and closely related to poor quality of health care and the most cost-effective response is to scale up women's access to quality midwifery care. It is recognized that midwives educated per international standards, integrated in the health care system, and working in interdisciplinary teams in providing midwifery care could decrease maternal deaths. One key issue is the shortage of qualified midwives and one critical component is the quality of midwifery education. There is an urgent need to educate qualified midwifery educators who can teach evidence-based midwifery care and practice in a manner that take into accounts the context.

Method:

The aim with the symposium is to provide insights into the implementation of high quality midwifery education in low resource settings and to share examples of how we may work to ensure that midwives are educated according to international standards.

Findings:

The symposium will provide an opportunity to consider the existing evidence and visualize key factors that contributes to developing high quality midwifery education. The symposium would cover brief presentations to gather what we know in relation to evidence base for quality midwifery education focusing on low resource settings. Current on-going partnerships to strengthen midwifery education will further be presented from Somali region, Malawi, Ethiopia and Bangladesh. The case presentations will focus on how higher education and research capacity are built through the implementation of net-based master education in sexual and reproductive health care and co-creation in PhD education focusing on midwifery. The development and implementation of quality assurance system, faculty mentorship program, simulation based learning program and Massive Open Online Course (MOOC) will further provide lessons learned as to how activities interact and provide a foundation for sustainable development in a low resource setting.

Conclusion:

Not relevant

W-05

Midwifery across borders - how can Nordic midwives make a contribution?

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Background:

The global maternal mortality ratio has dropped over the past 25 years, but still in 2015, 300 000 women died during pregnancy and birth; most of them in low- and middle-income countries. The UN Global Strategy for Women's, Children's and Adolescents' highlights the urgent need for further progress to be made. Evidence shows that midwifery plays a "vital" role, and when provided by educated, trained, regulated, licensed midwives, is associated with improved quality of care and reductions in maternal and newborn mortality. Despite this knowledge midwifery is still not well recognized in all parts of the world. In the Nordic countries, however, midwifery has a long tradition and is a well-established profession. Nordic midwives are therefore well suited to contribute to strengthen global midwifery.

Method:

The aim is of this workshop is to challenge and inspire Nordic midwives to strengthen global midwifery.

Questions to be explored

1. Which international organizations are relevant for strengthening midwifery and what do they do?
2. What are the main areas where Nordic midwives can make a difference?
3. What competencies are required for international missions?
4. Where do I find suitable job offers and how do I apply?
5. Can we create a Nordic network for global midwifery?

The workshop will be organized as follows:

Three Nordic midwives will share their experiences of working with global midwifery within areas such as policy, advocacy, education, and research (30 minutes).

Three international organizations will present their programmes related to midwifery (30 minutes).

An interactive discussion where the above-mentioned questions will be further elaborated on and the audience is invited to participate (30 minutes).

Findings:

The outcome of this workshop will be an enhanced commitment to global midwifery among Nordic midwives.

Conclusion:

Stronger midwifery will help save women's and children's lives worldwide and Nordic midwives can have a key role.

W-06**The Nordic Network of Academic Midwives**

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Background:

Researching midwives from five Nordic countries have started a network focusing on midwifery models and theories. WHO guidelines and The International Childbirth Initiative recommend that all women throughout the world should have access to safe and respectful maternity care. Moreover, a framework for quality maternal and newborn care (QMNC) has been presented in the Lancet. It states that there is a need to change maternity care systems across the world from focusing on identification and treatment of pathology to optimizing biological, psychological, social and cultural processes. We strongly agree on these guidelines and the framework. However, since professional roles and organisations of maternity care differs across countries, it is necessary to identify specific Nordic challenges and thus develop theories and models for maternal care, and for midwifery practice.

The aim of the network is to develop a Nordic platform for midwifery research and academic activities.

Method:

Activities:

PhD course aimed at Nordic midwifery researchers (will be held at University of Iceland April 29th to May 1st).

Write a discussion article about the Nordic context and challenges and need for future research

Conduct a systematic review about models of midwifery care

Organise an open workshop or conference during 2020

Develop a course about midwifery theories and models in a Nordic context, aimed at Nordic midwifery students.

Findings:

At the symposium, we want to present the following:

Presentation of the network – how it started, our work up to now and further plans

Midwifery in a Nordic context: what is it, and what are the challenges – a discussion paper

Midwifery Models of Care – a mapping review.

“MiMo” – an Icelandic-Swedish model for midwifery care

The PhD course “Models and theories for midwifery” – experiences from the first course

Conclusion:

At the symposium, we will to present the network, our ongoing work and plans.

W-07

Bridging a culture gap enhances personal growth except when it doesn't. Longitudinal qualitative action research of Twinning between Dutch and Moroccan midwives.

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Background:

Navigating a culture gap can facilitate personal and professional growth of participants of Twinning, defined as 'a cross cultural, reciprocal process where two group of people work together to achieve joint goals'. Yet we don't fully understand how this works. This study of a four-year Twinning experience between midwives from Morocco and The Netherlands aims to explore this.

Method:

This longitudinal qualitative action participation research used data from a baseline open-ended questionnaire to ascertain expectations, and midterm and end focus groups and project team observations to explore the process and experienced outcomes amongst 18 pairs of Twins. Data was analysed using a content analysis.

Findings:

The first theme explored outcomes compared to initial expectations, Moroccan Twins appeared satisfied with their expected results whilst Dutch Twins appeared more cynical and disappointed. The second theme explored the influence of culture. Data revealed a steady increase in personal and professional growth and an increasing culture gap for Moroccan Twins. For Dutch Twins the culture gap transformed into cultural friction resulting in minimal personal and professional growth. An equitable reciprocal environment and personal motivation to bridge the culture gap seemed to facilitate personal and professional growth. Notably no Twins wanted to have missed her Twinning experience.

Conclusion:

Twinning is a complex process with ample intra and inter group variation. A culture gap facilitated, whilst cultural friction hindered, personal and professional growth. The culture gap played an important role in the dynamics and subsequent growth of Twins. Personality was sometimes concealed by culture. It is likely that personality has a big influence on the Twinning process, this warrants further investigation.

W-08

How can midwives support women to work with pain in labour?

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Background:

For midwives it is important to have a good understanding of how each and every woman experiences pain in labor in order to be capable of caring as well as possible for women during childbirth.

Method:

A mutual understanding between the woman and her midwife of how the woman can work with the pain is crucial so that the two parties concerned can work together and maximize the likelihood of a good experience for the woman in terms of pain during labor. Midwives are supposed to "be with" women in labor and it is our obligation to guide each and every woman through the birth. One of our roles is to assist the woman in question manage with her pain during birth and this is the reason why it is so important for us to understand women's experience of pain in childbirth.

Findings:

If midwives want to be capable of supporting them as well as possible and giving them information during pregnancy regarding how to work with pain in labor they have to be aware of different approach to pain during childbirth.

Conclusion:

In the workshop we will work with issues like words we use to describe pain in childbirth and look at visual perceptions of pain in labour. We will discuss our understanding of how midwives should assist women to manage through the pain and discuss what midwives need to have to be able to assist women through pain in labour.

W-09

Implementing a screening programme for perineal repair outcomes the first week postpartum.

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Background:

More than 90% of primiparous women sustain perineal injury or lacerations to the labial area that requires surgical repair following vaginal birth.

Aarhus University Hospital has 5000 births annually and our staff includes 120+ midwives, 40+ doctors and a variety of midwifery and medical students in training programmes.

Method:

The hospital implemented a new postnatal service in 2013 including routine wound assessment at 2-3 days after birth. Early secondary repair or delayed primary repair is offered in case of suboptimal primary repair or undiagnosed genital tract trauma.

Findings:

We wish to share experiences with 20.000+ perineal wound evaluations performed during 2013 to 2019. Photos and short video cases will present the vulval and perineal assessment.

Inadequate primary perineal repair or early suture break down was found in approx. 1% of the population. We wish to share experiences from a case study of 250+ cases including 1st. -2nd degree lacerations and mediolateral episiotomies.

Conclusion:

All women should have access to perineal care clinics in the immediate postpartum period.

Feedback to colleagues and students is most helpful when photos can document objective outcomes. Feedback is delicate as it can introduce guilt and frustration.

Postgraduate training programmes should target also experienced clinicians, as they may have unrecognised needs for improved diagnostic skills and surgical skills.

W-10

The Confident Birth 'SAFE' Emotional birth Model: how to decrease fear and stress during childbirth

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Background:

It is a well-known phenomenon within the maternity care sector that increasing numbers of women today are experiencing fear and stress before and during childbirth. Until this point, the problem has been *how* we can support birthing women to change this negative cycle. The method and book "Confident Birth" (Föda utan rädsla) provides a care model called the Stress And Fear Evaluation model ("SAFE"). This model enables caretakers and others working with birth to detect and redirect fear both before and during childbirth, and gives them tools and support strategies to help empower women to cope with these challenges during labour.

Method:

Confident Birth and the "SAFE" model will not only deepen understanding as to how fear often negatively impacts the delivery, but also provide a solution based on physiology and modern science. The method is unique and has already been taught all over Sweden as well as abroad, at conferences, to staff in maternity care and wards, and at several midwifery schools. This oral presentation/workshop offers education and practical training on how to detect, change and break stress patterns.

Findings:

Despite the evidence that support during birth has a significant impact on medical outcomes and the emotional experience of the woman giving birth, there is a lack of training in *how* this support can best be given. What is needed is a common model that will ensure not only the medical but also emotional safety of birthing women and their partners.

Conclusion:

The implementation of support during the active phase of labour is under-developed. Many midwives have expressed a need for training in this area. Confident Birth offers a model to meet those needs: "SAFE."

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