Appendix C - Clinical Evidence Extractions

1.1 Chapter: 3 PLANNING THE CONTENT AND DELIVERY OF CARE

134 What are the models for delivering the care?

Grading: ***1++*** ***High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias***

RID: 694 **Reference number** 4787

Hodnett ED;

Continuity of caregivers for care during pregnancy and childbirth

1998 Ltd **pgs**

Chiche

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions This is a review of two studies involving 1815 women. Both trials compared continuity of care by midwives with non continuity of care by a combination of physicians and midwives. Women with continuity of care were more likely to feel able to discuss postpartum problems and more likely to feel prepared for child care. The reviewers conclude that The two studies show beneficial effects of continuity of care overall.

Quality ++

Grading: ***1+*** ***Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias***

RID: 665 **Reference number** 4351

Brown S;Small R;Faber B;Krastev A;Davis P;

Early postnatal discharge from hospital for healthy mothers and term infants

2004 Issue 3 The Cochrane

Library **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions This review reported inconclusive findings. There is no evidence of adverse outcomes associated with policies of early postnatal discharge but this possibility cannot be ruled out.

Quality + A pooled estimate from six trials on breastfeeding outcomes was calculated despite significant heterogeneity. The rationale was that all studies compared early discharge with standard care.

RID: 684 **Reference number** 4776

Ciliska D;Mastrilli P;Ploeg J;Hayward S;Brunton G;Underwood J;PHRED Program;

The effectiveness of home visiting as a delivery strategy for public health nursing interventions to clients in prenatal and postnatal period: a systematic review

1999 PHRED Program, Public Health Branch Ontario Ministry of Health **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Ontario Public Health Research

Conclusions There were no reported negative effects of home visiting. Positive outcomes included improvement in children's mental development, mental health and physical growth, reduction in mother's depression, improvement in maternal employment, education, nutrition and other health habits. No proven impact on low birth weight, gestational age or neonatal morbidity or

Quality + Non randomised studies included in review. Review also included studies of premature infants and high risk women

RID: 718 **Reference number** 4812

Escobar GJ;Braveman P;

Home visits vs. hospital-based group follow-up visits after early postpartum discharge

2001 49: (4) Pediatric Research **pgs** 196A

Study Type: Randomised Controlled Trial

Patient Characteristic pp women whose discharge was anticipated on the day of recruitment at Kaiser Foundation Hospital

Intervention Group pp visits v. home visits

Comparisons With one exception (maternal urgent care visits - $p<0.01$) the clinical outcomes for mothers and babies did not differ between groups. Mothers in the home visit group were more satisfied with care ($p<0.01$)

Study Length 2 weeks

Outcomes Chi square and p values

Effect NS difference on clinical outcomes. Maternal satisfaction in home visit group significant,

Funding Kaiser Permanente

Conclusions The authors found that group postnatal visits and home visits achieved equivalent clinical outcomes. However, group visits had far lower costs, whereas home visits had markedly higher maternal satisfaction.

Quality + Satisfaction surveys subject to potential bias

RID: 672 **Reference number** 4750

Grullon KE;Grimes DA;

The safety of early postpartum discharge: a review and critique

1997 90: (5) Obstetrics and Gynecology **pgs** 860 865

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions The reviewers concluded that the current data do not support or condemn widespread use of early postpartum discharge in the general population. Early pp discharge appears safe for carefully selected, consenting women.

Quality + This review was medline only

RID: 662 **Reference number** 2368

Gunn J;Southern D;Chondros P;Thomson P;Robertson K;

Does an early postnatal check-up improve maternal health: results from a randomised trial in Australian general practice

1998 105: British Journal of Obstetrics & Gynaecology **pgs** 991 997

Study Type: Randomised Controlled Trial

Patient Characteristics PP women with full term live birth and healthy baby

Intervention Women were randomised to a GP visit one week after discharge versus a six week checkup

Comparisons Breastfeeding rates; depression; maternal health; communication with provider and content of exam

Study Length 6 months

Outcomes ORs

Effect Women in the intervention group were less likely to have a vaginal exam (OR 0.51, 0.34-0.77)or pap smear(OR0.34, 0.22-0.52) and more likely to talk to the GP about their baby (p=0.02) and about labour and birth (OR1.77, 1.17-2.68). There were NS differences on any major health outcomes studied.

Funding Victorian Health Promotion Foundation, Royal Australian College of General Practitioners

Conclusions The authors suggest that a shift in focus might occur from a routine vaginal examination to an opportunity to spend time talking with a GP.

Quality + This is a survey using self reported questionnaire.

RID: 693 **Reference number** 4785

Hicks C;Spurgeon P;Barwell F;

Changing Childbirth: a pilot project

2003 42: (6) Journal of Advanced Nursing **pgs** 617 628

Study Type: Randomised Controlled Trial

Patient Pregnant women booking at a local trust

Characteristics

Intervention Team midwifery v. traditional care

Comparisons Satisfaction with various aspects of pp care

Study Length 6 weeks

Outcomes Chi square and p values

Effect NS differences on clinical outcomes;the continuity of care group had statistically significant greater satisfaction with care at home following birth. However, overall satisfaction levels for both groups were high, indicating that while the traditional care group might have been less satisfied their absolute satisfactions levels were still high.

Funding Unknown

Conclusions This study adapted the concept of continuity of carer to continuity of care and concludes that this study supports the possibility of using team midwifery to provide care in the spirit of Changing Childbirth.

Quality + Questionnaires are subject to bias as the responses are subjective and voluntary

RID: 668 **Reference number** 4681

Lieu TA;Braveman PA;Escobar GJ;Fischer AF;Jensvold NG;Capra AM;

Randomized comparison of home and clinic follow-up visits after early postpartum hospital discharge

2000 105 (5) Paediatrics **pgs** 1058 1065

Study Type: Randomised Controlled Trial

Patient Characteristics PP women about to be discharged from Kaiser Foundation Hospital in Sacrament, California

Intervention One home visit v. one paediatric clinic visit

Comparisons Rehospitalization, emergency visits and urgent clinic visits, breastfeeding discontinuation and maternal satisfaction

Study Length 2 weeks

Outcomes RR

Effect NS differences on clinical parameters. Mothers in the home visit group were more satisfied with all aspects of care ($p<0.001$)

Funding Innovation Program of Kaiser Permanente

Conclusions This study indicates that maternal satisfaction is higher for a home visiting program than a clinic based program.

Quality + Telephone interviews may have introduced bias

RID: 651 **Reference number** 612

MacArthur C;Winter HR;Bick DE;Lilford RJ;Lancashire RJ;Knowles H;Braunholtz DA;Henderson C;Belfield C;Gee

Redesigning postnatal care: a randomised controlled trial of protocol-based midwifery-led care focused on individual women's physical and psychological health needs. [102 refs]

2003 7: 37 Health Technology Assessment **pgs** 1 98

Study Type: Randomised Controlled Trial

Patient Characteristics There were no significant differences between the women but there were some proportionate differences. In the main intervention group there was a higher proportion of women at risk for poor health outcomes.

Intervention Midwifery lead carefor 28 days pp using a symptom checklist and the EPDS for screen for pp depression.

Comparisons Physical and psychological health at 4 and 12 months and satisfaction with care.

Study Length 12 months

Outcomes Chi square and p values

Effect NS difference on physical health scores. The EPDS and MCS scores were significantly better in

the intervention group (p<0.0003)

Funding HTA

Conclusions These researchers concluded that the redesigned community postnatal care led by midwives and delivered over a longer period resulted in an improvement in women's mental health at 4 months pp which persisted at 12 months. The data do not provide evidence for the cause of improved psychological well being in this model.

Quality + Use of SF 36 in pp women not validated; use of EPDS scores as an outcome may not be a valid use of the scale. However, the EPDS may be used as a screening tool in research among pp women >28 days post delivery. Diaries kept by women may be biased.

RID: 674 **Reference number** 4754

Margolis LH;

A critical review of studies of newborn discharge timing

1995 34: (12) Clin Pediatr (Phila) **pgs** 626 634

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding CDC and Maternal and Child Health Bureau

Conclusions All 13 studies reviewed suggest that there are no differences between infants discharged early and those receiving standard care. However the studies have methodological flaws and require careful interpretation.

Quality + Medline only

RID: 702 **Reference number** 4796

Morrell CJ;Spiby H;Stewart P;Walters S;Morgan A;

Costs and benefits of community postnatal support workers: a randomised controlled trial

2000 4: (6) Health Technology Assessment **pgs**

Study Type: Randomised Controlled Trial

Patient Characteristics Postnatal women in Sheffield who delivered a live baby

Intervention Support workers and midwifery care v. usual midwifery care

Comparisons Physical and mental health and social support

Study Length 6 months

Outcomes SF-36, EPDS, DUFSS, and EQ-5D

Effect Control group significantly better physical and social functioning (p<0.01 and p<0.03). No other significant differences on primary clinical outcomes

Funding HTA

Conclusions It appears that from a clinical standpoint the use of support workers is not effective in improving mother's health.

Quality + Survey response are subjective and involve a self selected population and may be biased

RID: 647 **Reference number** 300

Reid M;

A two-centred pragmatic randomised controlled trial of two interventions of postnatal support

2002 109: (10) BJOG: an International Journal of Obstetrics & Gynaecology **pgs** 1164 1170

Study Type: Randomised Controlled Trial

Patient Characteristics Primiparous women who attended antenatal clinics between 34 and 37 weeks of pregnancy

Intervention Use of manual v. support group for additional support in pp time period

Comparisons EPDS scores, SF-36 scores for physical and mental health; SSQ6 scores for social support

Study Length 6 months

Outcomes Chi square and p values

Effect NS differences on any of the outcome measures

Funding Scottish Office

Conclusions This study indicates that wide scale provision of support groups or self help manuals is not appropriate if the aim is to improve measurable health outcomes

Quality + This study used the SF 36 for physical and mental health assessment - not validated for pp women. Maternal responses subject to potential bias

RID: 641 **Reference number** 9

Steel O'Connor KO;Mowat DL;Scott HM;Carr PA;Dorland JL;Young Tai KF;

A randomized trial of two public health nurse follow-up programs after early obstetrical discharge: an examination of breastfeeding rates, maternal confidence and utilization and costs of health services

2003 94: (2) Canadian Journal of Public Health **pgs** 98 103

Study Type: Randomised Controlled Trial

Patient Characteristic Women delivering infants at two tertiary care hospitals in southeastern Ontario. All mothers were primiparours, and delivered a single infant vaginally.

Intervention Home visit v. telephone screening pp

Comparisons Maternal confidence, infant health and breastfeeding

Study Length 6 months

Outcomes ORs and p values

Effect NS difference in maternal confidence, infant health and breastfeeding. See economic analysis

Funding The Physicians' Services Incorporated Foundation

Conclusions This study concludes that although universal access to pp support is important, the results suggest that a routine home visit is not always necessary to identify the women who need it.

Quality + Validity of maternal confidence scale not provided;all other information by maternal report which has potential for bias.

RID: 712 **Reference number** 4806

Turnbull D;Holmes A;Shields N;Cheyne H;Twaddle S;Gilmour WH;McGinley M;Reid M;Johnstone I;Geer I;McIlwaine G;Lunan CB;

Randomised, controlled trial of efficacy of midwife-managed care.

1996 348: 9022 Lancet **pgs** 213 218

Study Type: Randomised Controlled Trial

Patient Characteristics Pregnant women with no adverse characteristics attending the Glasgow Royal Maternity

Intervention Shared care v. midwifery managed care

Comparisons Maternal satisfaction with hospital and home postnatal care

Study Length 7 weeks pp

Outcomes Chi square and p values

Effect Satisfaction with hospital pp care p<0.00001 in midwifery group. Women in the midwife managed group also resported greater satisfaction with choice(p<0.0006), information (p<0.03), decision making(p<0.007) and individualised care(p<0.02).

Funding Scottish Office Home and Health Department

Conclusions The conclusion of the researchers was that midwife managed care for healthy women integrated within existing services is clinically efficacious.

Quality + Clinical information was complete for 97.5% and 99.2% of women in the study. But lower response rates for the questionnaire and the subjective nature of the investigation may bias results

RID: 649 **Reference number** 556

Waldenstrom U;

Early and late discharge after hospital birth: Fatigue and emotional reactions in the postpartum period

1988 8: (2) Journal of Psychosomatic Obstetrics & Gynecology **pgs** 127 135

Study Type: Randomised Controlled Trial

Patient Characteristics Postpartum women in a Swedish clinic, with uncomplicated vaginal delivery

Intervention Early discharge (24-48 hours) and normal hospital care

Comparisons Levels of fatigue by diary; baby blues by tearfulness; and depression by questionnaire report

Study Length 42 days

Outcomes Chi square, p values

Effect NS difference in fatigue, baby blues and depressed mood. In both groups women were most tired during the first days after hospital discharge.

Funding Swedish Minisry of Health and Social Affairs

Conclusions

Quality - The high dropout rate, particularly in the experimental group was a potential bias in this study. The results are also a subjective evaluation

RID: 717 **Reference number** 4811

Wiggins M;Oakley A;Roberts I;Turner H;Rajan L;Austerberry H;

The Social Support and Family Health Study: a randomised controlled trial and economic evaluation of two alternative forms of postnatal support for mothers living in disadvantaged inner-city areas

2004 8: 32 Health Technology Assessment **pgs**

Study Type: Randomised Controlled Trial

Patient Characteristic Women who had given birth between 1 January 1999 and 30 September and were resident in the deprived districts of Camden and Islington.

Intervention Social support via home support visitors, community groups or usual care

Comparisons Child injury, maternal smoking, maternal depression , health service usage, maternal and child health, infant feeding and experience of motherhood

Study Length 18 months

Outcomes RR and mean difference, p values

Effect NS differences on the primary outcomes of maternal depression, child injury or maternal smoking. Uptake of community group support intervention was low: 19% compared with 94%. Over half of the women in the home support visitor group found them to be very helpful.

Funding HTA

Conclusions There was no evidence of impact on the primary outcomes of either intervention. The home support visitors were popular with women .

Quality + Maternal self report and the EPDS used at baseline may introduce bias

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 707 **Reference number** 4801

Shields N;Reid M;Cheyne H;Holmes A;McGinley M;Turnbull D;Smith LN;

Impact of midwife-managed care in the postnatal period: An exploration of psychosocial outcomes

1997 15 2 Journal of Reproductive & Infant Psychology **pgs** 91 108

Study Type: Randomised Controlled Trial

Patient Characteristic Antenatal women who booked within 16 weeks of pregnancy and had no known medical or obstetric complications

Intervention This is a comparison of care by the same midwife in hospsital and at home versus care by two different sets of midwives in hospital and at home

Comparisons Women rated structure of postnatal care, preparation for parenthood, postnatal depression and infant feeding.

Study Length 7 week postnatal questionnaire

Outcomes Chi square trends

Effect Women in the intervention group rated their care more highly in relation to : structure of care ($p<0.00001$); preparation for parenthood ($p<0.00001$) and advice about infant feeding ($p<).00001$). They were also less likely to be depressed based on responses to EPDS ($p=0.01$)

Funding Scottish Home and Health Department

Conclusions This study suggests that continuity of care has the potential to confer some psychosocial benefit to women but the results herein must be interpreted with caution due to poor response rate and subjectivity of responses.

Quality - The response rate was low and the questionnaire subjective . EPDS not validated as a 9 item scale but mean scores were compared.

Grading: *2+ Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 700 **Reference number** 4794

McCourt C;Page L;Hewison J;Vail A;

Evaluation of one-to-one midwifery: women's responses to care

1998 25: (2) Birth **pgs** 73 80

Study Type: Cohort

Patient Characteristic Pregnant women in the study areas were referred to one to one care. There were differences in the populations which comprised study groups and control groups. The study group had more social risk factors.

Intervention Style of midwifery care

Comparisons Women who received one to one care and women who received conventional care were evaluated on satisfaction with care including home and hospital pp care, preparation for parenthood and preference for continuity of care.

Study Length 13 weeks pp

Outcomes Frequency percents

Effect Postpartum hospital care: 50% of study group v. 54% of control group 'very satisfied' NS differences in postpartum physical symptoms (no stats given). Postnatal depression scores were similar(no stats given).

Funding King's Fund and core grants to the Centre for Midwifery Practice

Conclusions The evaluation of one to one midwifery care wasncompared to conventional care. Although women appeared to be satisfied with care there were no significant statistical differences in satisfaction or in physical or psychological symptoms. The population samples differed on several socioeconomic factors and it is unclear whether these were controlled for in the analysis. The sample was not randomised and there was a relatively low response rate to

Quality + This survey involves obtaining subjective responses from a self selected group. The inherent bias in this methodology may affect outcomes.

Grading: *2- Case–control or cohort studies with a high risk of confounding bias, or chance and a significant*

RID: 687 **Reference number** 4779

Farquhar M;Camilleri C;Todd C;

Continuity of care in maternity services; women's views of one team midwifery scheme

2000 16: (1) Midwifery **pgs** 35 47

Study Type: Cohort

Patient Characteristics Postpartum women in southeast England

Intervention Midwifery teams versus standard care

Comparisons Maternal satisfaction with pp care in hospital and at home in each group

Study Length One time questionnaire after six weeks pp

Outcomes Satisfaction and continuity of carer

Effect NS differences in satisfaction for postpartum care in hospital and at home; the study group reported the lowest continuity of carer(care from just one or two midwives) both antenatally and postnatally: 22 % compared to 82% and 52% in the comparison groups.

Funding North Thames Regional Health Authority and North Essex Health Authority

Conclusions The authors conclude that midwifery teams of seven midwives may be too large. The focus on continuity through antepartum, intrapartum and postpartum may be misguided and that the focus might better be focused on the antenatal and postnatal periods.

Quality - Adjustment for confounding not described despite known differences between groups. The return of questionnaires is a self selected process and answers arfe subjective

RID: 710 **Reference number** 4804

Spurgeon P;Hicks C;Barwell F;

Antenatal, delivery and postnatal comparisons of maternal satisfaction with two pilot Changing Childbirth schemes compared with a traditional model of care

2001 17: (2) Midwifery **pgs** 123 132

Study Type: Cohort

Patient Characteristics Pregnant women randomly drawn from GP practices in the sponsoring Trust

Intervention Models of service delivery

Comparisons Satisfaction; clinical outcomes; number of days in hospital and number of home visits; information and advice

Study Length 6 weeks

Outcomes Chi square; p values

Effect NS difference in length of stay; Significat differences on number of home visits there being fewer for Group C ($p<0.001$). Groups A and B were significantly more satisfied on all aspects of postnatal care ($p<0.05$). There were not differences in clinical outcomes.

Funding Unknown

Conclusions Midwifery led care was preferred by women in this study and did not lead to any deficits in clinical outcomes. The authors also note that since burn out and stress have been identified as features of one to one midwifery provision, the team model might have potential for offsetting this problem while still providing care in the spirit of Changing Childbirth.

Quality - Comparability of groups not reported; randomisation not explained; satisfaction survey validation not ; subjective responses subject to bias

Grading: *3 Non-analytic studies (for example, case reports, case series)*

RID: 659 **Reference number** 819

Twaddle S;Hui LX;Fyvie H;

An Evaluation of postnatal care individualised to the needs of the woman

1993 9: (3) Midwifery **pgs** 154 160

Study Type: Cohort

Patient Characteristics Women with normal vaginal deliveries who lived in the eastern district of Glasgow were

Intervention Standard pp care and individualised care

Comparisons Clinical outcomes and satisfaction

Study Length 6 weeks pp

Outcomes Chi square and p values

Effect NS differences in clinical complaints. There was a significant reduction in the mean number of pp visits, $p<0.005$ and in mean number of different midwives visiting the women in their homes , $p<0.005$. Women were satisfied with type of care (72%)

Funding Chief Scientist's Office, Scottish Home and Health Department

Conclusions This study indicates that women may be satisfied with fewer individualised pp visits.

Quality + Satisfaction survey subject to bias. This is a before and after design which was not randomised and is a convenience sample.

132 Is there an optimal PP stay in hospital

Grading: *1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 608 **Reference number** 4742

Boulvain M;Perneger TV;Othenin-Girard V;Petrou S;Berner M;Irion O;

Home-based versus hospital-based postnatal care: a randomised trial

2004 111: (8) BJOG: an International Journal of Obstetrics & Gynaecology **pgs** 807 813

Study Type: Randomised Controlled Trial

Patient Characteristics Low risk women were recruited antenatally

Intervention Reduced hospital sty with home visits by a midwife and hospital based care with usual midwifery follow up

Comparisons Short stay is compared to normal stay with outcomes including breastfeeding, maternal and infant morbidity and women's views on their care

Study Length 6 months

Outcomes Breastfeeding by maternal report;satisfaction with care by maternal report;hospital readmission; physical and mental health by EPDS and SF 12.

Effect Women in the home based group had more midwife visits 4.8 vs 1.7, p<0.001. NS difference in breastfeeding duration, satisfaction with care, women's hospital readmissions, postnatal depression and health status scores. A higher percentage of neonates were readmitted (12& vs 4.8%, p=0.004)

Funding Swiss National Science Foundation

Conclusions There did appear to be a difference in infant hospital admissions in the short stay group in this study. However the authors concluded the overall early discharge was an acceptable alternative to longer stays. Mothers' preferences and economic considerations should be taken

Quality + EPDS & SF 12 were used to evaluate mental and physical health. Study slightly underpowered

RID: 617 **Reference number** 4143

Gagnon AJ; Dougherty,G.; Jimenez,V.; Leduc,N.

Randomized trial of postpartum care after hospital discharge

2002 109: (6) pediatrics **pgs** 1074 1080

Study Type: Randomised Controlled Trial

Patient Characteristics All pp women recruited just before early discharge(<36 hours)

Intervention Community v. clinic pp followup

Comparisons Breastfeeding frequency, infant weight gain, maternal anxiety, health service satisfaction and health and community services use.

Study Length 2 weeks pp

Outcomes RR

Effect NS differences on any of the outcome measures

Funding Fonds de la recherche en sante du Quebec.

Conclusions This study indicates that follow up by nurses in either home or a hospital based clinic is associated with satisfactory outcomes.

Quality + Feeding diary may be subject to bias. Client Satisfaction Questionnaire and State Trait Anxiety Inventory were validated instruments.

RID: 636 **Reference number** 4765

Grullon KE;Grimes DA;

The safety of early postpartum discharge: a review and critique

1997 90: (5) Obstetrics & Gynecology **pgs** 860 865

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Unknown
Conclusions RR and CIs were calculated for maternal and neonatal readmission and outpatient treatment after early pp discharge. Five RCTs did not meet criteria for properly designed trials. Most evidence consists of cohort studies and case series . The data do not support or condemn early discharge in the general population. Early pp discharge appears safe for carefully selected, consenting patients.
Quality + This review is medline only and included a variety of study types

RID: 620 **Reference number** 4750
Grullon KE;Grimes DA;
The safety of early postpartum discharge: a review and critique
1997 90: (5) Obstetrics and Gynecology **pgs** 860 865
Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Unknown
Conclusions The researchers conclusions were as follows: The current data do not support or condemn widespread use of early postpartum discharge in the general population. Early pp discharge appears safe for carefully selected, consenting patients.
Quality + Medline search only

RID: 630 **Reference number** 4754
Margolis LH;
A critical review of studies of newborn discharge timing
1995 34: (12) Clin Pediatr (Phila) **pgs** 626 634
Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding CDC and Maternal and Child Health Bureau
Conclusions This review concludes that the limitations in the published literature suggest that need for ongoing attention to the timing of discharge.All thirteen studies reviewed suggest that there are

no differences between infants discharged early and those receiving standard care but all studies also had methodological flaws which limit generalisability.

Quality + Medline search only

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 612 **Reference number** 4744

Conseil d'Evaluation des Technologies de la Sante du Quebec;
Evaluation of the risks and benefits of early postpartum discharge - systematic review

1997 Conseil d'Evaluation des Technologies de la Sante du Quebec (CETS) **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions It appears from this study that the RR of readmission was unchanged with early discharge but the results need to be interpreted carefully due to studies included in the meta analysis.

Quality - It appears that RR and ORs were combined in the meta analysis and therefore it is likely that case control studies were included. This MA was then no limited to RCTs and its validity must be questioned

Grading: *2+ Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 607 **Reference number** 4741

Bossert R;Rayburn WF;Stanley JR;Coleman F;Mirabile CLJ;
Early postpartum discharge at a university hospital. Outcome analysis

2001 46: (1) Journal of Reproductive Medicine **pgs** 39 43

Study Type: Cohort

Patient Characteristic Non Hispanic white women who delivered beyond 37 completed weeks and were either self pay or eligible for medicaid.

Intervention Willingness to be discharged early and nwws doe ewSMIAAION

Comparisons Comparisons among the three groups noted above

Study Length 6 weeks

Outcomes Frequency percents and p values--statistical test not described

Effect There was no significant difference in readmission rates. According to nursing notes all eligible patients were willing to be discharged early after reviewing written instructions.

Funding Records Perinatal Research Fund

Conclusions Early postpartum discharge was acceptable to a predominatly medicaid population and was not associated with increased maternal morbidity.

Quality + Mothers willingness to be discharged early may have been dependent on the presentation of the information

RID: 626 **Reference number** 4751

Lieu TA;Wikler C;Capra AM;Martin KE;Escobar GJ;Braveman PA;

Clinical outcomes and maternal perceptions of an updated model of perinatal care

1998 102: (6) Pediatrics **pgs** 1437 1444

Study Type: Cohort

Patient Characteristics Mothers and infants with hospital stays of 48 hours or less in a California hospital

Intervention A limited home visit policy v. paediatric care centre

Comparisons Rehospitalization, and emergency visit or urgent clinic visit withing first 14 days or breastfeeding discontinuation withing the first 21 days pp. Maternal satisfaction and costs were

Study Length 21 days

Outcomes ORs and p values

Effect There were NS differences in maternal rehospitalisations, emergency visits or urgent clinic visits.There was no difference with breastfeeding duration. Newborns in the study group were significantly less likely to make urgent clinic visits during the first 14 days of life (p=0.03). Maternal satisfaction was higher in the study group for newborn care and information about breastfeeding (p<0.01).

Funding Kaiser Permanente

Conclusions This study indicates that a pp clinic can effectively deliver care with good clinical outcomes and maternal satisfaction.

Quality + Telephone interviews could potentially introduce bias. Hospital records werean accurate data source.

RID: 631 **Reference number** 4755

Meikle SF;Lyons E;Hulac P;Orleans M;

Rehospitalizations and outpatient contacts of mothers and neonates after hospital discharge after vaginal

1998 179: (1) American Journal of Obstetrics & Gynecology **pgs** 166 171

Study Type: Cohort

Patient Characteristic These were women who had a vaginal delivery at St. Joseph Hospital, Denver, Colorado from January 1994 to September 1995.

Intervention Readmissions and outpatient visits

Comparisons Women who were dischared <24 hours; 25-48 hours; >48 hours

Study Length Mothers were followed for six weeks and babies for 28 days

Outcomes The relative risk is calculated

Effect Only 67 neonates were readmitted during the first 28 days after birth. No association was found between length of stay and readmission.For the mothers, a longer hospital stay (>48 hours) was significantly assoicated with both readmission (p<0.01) and incresed outpatient care (p=0.01)

Funding Unknown

Conclusions This study appears to indicate that a longer hospital stay was significantly associated with hospital readmission and increased outpatient care in the pp period. However, the 'healthy mother' effect is in operation here. Mothers with potential and observed problems are rarely discharged early. Among babies discharged early, home care appeared to be protective for

Quality + This is a retrospective chart review. If records are accurate then the study is likely to be reasonbly robust

Grading: *3* *Non-analytic studies (for example, case reports, case series)*

RID: 610 **Reference number** 4743

Brown S;Bruinsma F;Darcy MA;Small R;Lumley J;

Early discharge: no evidence of adverse outcomes in three consecutive population-based Australian surveys of recent mothers, conducted in 1989, 1994 and 2000

2004 18: (3) Paediatric and Perinatal Epidemiology **pgs** 202 213

Study Type: Cohort

Patient Characteristic Participants in each survey were found to be largely representative in terms of parity, method of birth and infant birthweight

Intervention This study analyses three survey in Victoria, Australia to assess the impact of shorter stay on breast feeding and maternal depression. Surveys were done in 1989, 1993 and 1999.

Comparisons Comparisons are made between three survey groups on outcomes as above

Study Length 6 months

Outcomes There was no significant association between length of stay and primary outcome measures

Effect Adjusted OR for formula feeding at 6 weeks if 1-2 day stay is 1.31 [0.9-2.0] Adjusted OR for depression (EPDS score of >13) if 1-2 day stay 1.18 [0.7-1.9]

Funding Victoria Department of Human Services

Conclusions Based on these findings shorter lengthof stay does not appear to have an adverse impact on breast feeding or maternal depression.

Quality + The outcome measures were breastfeeding duration,depression by EPDS and satisfaction. The latter two outcomes measures are not validated for use in the general population

RID: 613 **Reference number** 4745

Dalby DM;Williams JI;Hodnett E;Rush J;

Postpartum safety and satisfaction following early discharge

1996 87: (2) Canadian Journal of Public Health Revue Canadienne de Sante Publique **pgs** 90 94

Study Type: Cohort

Patient Characteristics Postpartum women with no significant differences in demographic characteristics

Intervention Early discharge(as early as 6 hours pp) with home follow up versus standard hospital stay

Comparisons See above

Study Length Two and a half weeks

Outcomes ANOVA calculated for mean satisfaction scores.

Effect Total satisfaction: p=0.04. There was no significant difference between groups on readmission rates

Funding Unknown

Conclusions This early discharge program which did not require an initial home assessment and which allowed the early discharge mother to decide which services she felt she would need appeared to be safe and effective and flexible.

Quality + This controlled study is not randomised and uses a subjective outcome measure. Results may be biased.

RID: 625 **Reference number** 4676

Heck KE;Schoendorf KC;Chavez GF;Braveman P;
Does postpartum length of stay affect breastfeeding duration? A population-based study.

2003 30: (3) Birth **pgs** 153 159

Study Type: Cohort

Patient Characteristic These women were sampled from birth certificates in a stratified random manner which was weighted to represent all childbearing women in the state

Intervention Effect of length of stay on duratiion of breastfeeding

Comparisons Duration of breastfeeding in three groups - short stay, standard stay and long stay

Study Length The surverys were completed between 2 and 10 months

Outcomes The relative risk of breastfeeding cessation was calculated

Effect After controlling for confounders women with a short stay remained more likely to terminate breastfeeding than women with a standard stay (RR 1.11, 1.01-1.23)

Funding Unknown

Conclusions Women who leave the hopsital earlier than the standard stay are at slightly increased risk of terminating breastfeeding early

Quality + This survey information is derived from questionnaires which are subjective in

RID: 622 **Reference number** 4758

Radmacher PG;Massey CM;Adamkin DH;
Five-year experience with an early discharge program in well newborns

2001 99: (4) Journal of the Kentucky Medical Association **pgs** 147 153

Study Type: Cohort

Patient Characteristics All infants discharged from Norton Hospital from 1/1/94 to 31/12/98.

Intervention Early discharge and readmission rates

Comparisons Readmission rates and specifically readmission for jaundice

Study Length 7 days

Outcomes Frequency percents and p values. Statistical tests not described.

Effect Long stay infants were readmitted at a rate also most twice that of EDC infants (0.9% vs 0.5%, respectively p<0.05) but of 45 infants admittd for jaundice, 37 (82%) were discharged early compared with 8 (18%) infants discharged later (p<0.001).

Funding Summer Research Scholarship Program

Conclusions Overall, early discharge of well newborns appears to be a safe practice however the risk for jaundice may require early follow up.

Quality - The criteria for early discharge biased this review in favor of these healthy mothers and babies

138 What information needs to be communicated between health professionals at transfer of care

Grading: ***1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias***

RID: 764 **Reference number** 4855

Elbourne D;Richardson M;Chalmers I;et a;
The Newbury Maternity Care Study: A randomized controlled trial to assess a policy of women holding their own obstetric records

1987 94: (7) British Journal of Obstetrics & Gynaecology **pgs** 612 619

Study Type: Randomised Controlled Trial

Patient Characteristics Women delivering at Royal Berkshire Hospital in Reading

Intervention Holding of full obstetric record versus holding cooperation card

Comparisons Women's sense of control and ability to communicate with HCP, anxiety, clerical time and lost notes

Study Length 10 days pp

Outcomes Rate ratio

Effect Women holding full records felt greater sense of control (RR 1.45, 1.08-1.95) and felt it ws easier to talk to doctors and midwives (RR1.73; 1.16-2.59). There was no evidence of negative effects. Women holding full notes did not feel more anxious. There were savings in clerical time and no increase in the rate of lost notes.

Funding Nuffield Provincial HospitalsTrust

Conclusions

Quality + Responses contain subjective information

Grading: *3 Non-analytic studies (for example, case reports, case series)*

RID: 813 **Reference number** 4893

Charles R;

An evaluation of parent-held child health records

1994 67: (8) Health Visit **pgs** 270 272

Study Type: Cohort

Patient Characteristics All either providers or patients at six general practices and three clinics in North Staffordshire

Intervention Satisfaction with this tool for communication between paret and professional and between professionals; assess content

Comparisons Clinic cards and PHR; levels within survey groups

Study Length One time survey/audit 3mos after records initiation of PHR

Outcomes Frequency percents

Effect Parents liked the hand held record: 87% had a better understanding of advice, 99% could remember important things and 93% were more active inchild's health care. 60% of GPS and 92% of HV liked the PHR. The PHR contained more information than the clinic cards: 93% vs 13% had results of medical examinations; 94% versus 0% immunisations were recorded.

Funding Unknown

Conclusions Use of PHR

Quality + Combination of survey questionnaires and audit of PHR and clinic cards likely to provide accurate data

RID: 775 **Reference number** 4856

Farquhar M;Camilleri-Ferrante C;Todd C;

Working with team midwifery: health visitors' views of one team midwifery scheme

1998 27: (3) Journal of Advanced Nursing **pgs** 546 552

Study Type: Cohort

Patient Characteristics All HVs are nurses and 40% are also midwives; 6% have degree qualification.

Intervention This survey is an evaluation of team midwifery from the health visitor point of view

Comparisons Before and afterintroduction of team midwifery

Study Length NA

Outcomes Frequency counts; chi square

Effect Less than two thirds (n=21; 62%) of health visitors working in the new team midwifery system indicated they had a link midwife. The number of midwives in the community teams ranged from four to eight. Eighteen (51%) described their working relationship with community midwives as good; 12 (34%) described it as fair and two described it as poor. Three described it as excellent. However, communication appeared to ge generally better in the antenatal than in the posnatal period (p=0.002). Twenty six of the health visitors made suggestions for improvements in their working situation including: better communication 8/26; regular meetings 6/26; joint planning of prentcraft 4/26. Their greastest concerns were for the midwives who were tired and stressed but trying hard to make the scheme work (n=8).

Funding North Thames Regional health Authority and North Essex Health Authority

Conclusions The study reflects the health visitors' concerns about the team midwifery approach to pp care.

Quality + This is a survey aimed to describe experience and satisfaction levels. There is inherent bias in such a study that is primarily collecting qualitative data.

RID: 814 **Reference number** 4894

Jeffs D;Nossar V;Bailey F;Smith W;Chey T;

Retention and use of personal health records: a population-based study

1994 30: (3) J Paediatr Child Health **pgs** 248 252

Study Type: Cohort

Patient Characteristic Households with children aged 0-4; HCP included 118 GPs, 142 nurses 194paediatricians and 120 A & E workers

Intervention retention of PHR, use of PHRby parents and hcps

Comparisons Levels within each group

Study Length 0-4 years

Outcomes Frequency percents

Effect 89% retained PHR for 4 years and over 78% produced the record for inspection. 93% of parents expressed satisfaction with record and 64% of hcps found it beneficial. 91% had at least one immunisation and 68% had a complete regimen by age 4 years

Funding Unknown

Conclusions Use of PHR

Quality + Self reports but large sample likely to give generalisable responses

RID: 816 **Reference number** 4899

Macfarlane A;Saffin K;

Do general practitioners and health visitors like 'parent held' child health records?

1990 40: 332 Br J Gen Pract **pgs** 106 108

Study Type: Cohort

Patient Characteristic All working in Oxfordshire, some in areas where the child health records were held by parents and others where the records were held in clinic

Intervention Acceptability of records to professionals

Comparisons Those with and without experience of this record

Study Length 16 months after record initiated

Outcomes Frequency percents

Effect 91% of GPS with experience of using the PHR were in favor and 59% of those who had no experience were opposed. 90% of Health visitors were in favour. Areas of concern: possible los & recording sensitive information

Funding

Conclusions

Quality + Self report questionnaire which collected opinion

RID: 817 **Reference number** 4898

Saffin K;Macfarlane A;

How well are parent held records kept and completed?

1991 41: 347 Br J Gen Pract **pgs** 249 251

Study Type: Cohort

Patient Characteristics Parents of children born during 1986 and 1987

Intervention Loss of records; completion and content of records

Comparisons Parents holding records and clinic held records

Study Length Children ages 8 mos to 3 years

Outcomes Frequency percents

Effect 90% of parent held records and 95% of clinic records were available. 13% of parent held records had additional comments . 9 of 15 items were more thoroughly completed in parent

Funding Unknown

Conclusions Use of PHR

Quality + Audit of records in hand and completeness likely to be accurate

RID: 819 **Reference number** 4896

Volkmer RE;Gouldstone MA;Ninnes CP;

Parental perception of the use and usefulness of a parent-held child health record

1993 29: (2) J Paediatr Child Health **pgs** 150 153

Study Type: Cohort

Patient Characteristics Parents attending child health facilities

Intervention Levels of use of PHR

Comparisons Frequency of use and satisfaction with PHR

Study Length Surveyed for one day only

Outcomes Frequency percents and chi square

Effect 89.7% of parents found record somewhat or very useful. 44.6% of clients took the record fairly often orvery often to GP office. 22.9% of GPs used the record fairly often or very often by parent report.The moset useful items in the record were immunisation (92.4%),, growth charts (72.7%) and health check (66.7%).

Funding Unknown

Conclusions Use of PHR

Quality + Self reported questionnaire may contain bias

RID: 821 **Reference number** 4895

Young S;Fasher M;

An observational study of the NSW parent-held record in a GP setting

1994 23: (4) Australian Family Physician **pgs** 704 712

Study Type: Cohort

Patient Characteristics parents of children born on or after July 1988

Intervention use of PHR and content of record

Comparisons Comparisons between users and non users and levels of content

Study Length Children ages 0-5

Outcomes Frequency percents

Effect Approximately half of the parents were carrying the record.92% had immunisation record and 40% had progress notes by doctors. 15% had parent progress notes

Funding Unknown

Conclusions Use of PHR

Quality + Survey of record use and content likely to be accurate

1.2 Chapter: 5 Maintaining Maternal Health

12 Genital tract sepsis - Risk and Recognition What are the signs and symptoms? What are the risk factors?

Grading: *1++ High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 970 **Reference number** 4907

French LM;Smaill FM;

Antiobiotic Regimens for Endometritis After Delivery

2001 Cochrane Database of Systematic Reviews John Wiley & Sons Ltd **pgs**

Study Type: Systematic Review

Patient Characteristics Women diagnosed with postpartum endometritis

Intervention

Comparisons

Study Length

Outcomes -------

Effect

Funding Cochrane

Conclusions Discussion of risk factors in introduction.

Quality

RID: 974 **Reference number** 4911

National Collaborating Centre for Women's and Children's Health.;

Antenatal care: routine care for the healthy pregnant woman

2003 Royal College of Obstetricians and Gynaecologists Press pgs

Study Type: Guideline

Patient Characteristics ---

Intervention ---

Comparisons ---

Study Length Department of Health

Outcomes Signs and symptoms of pre-eclampsia and eclampsia

Effect

Funding

Conclusions

Quality

RID: 914 **Reference number** 2720

Royal College of Obstetricians and Gynaecologists.;
Thromboembolic Disease in Pregnancy and the Puerperium: Acute Management. Guideline No. 28.

2001 Royal College of Obstetricians and Gynaecologists Press pgs

Study Type: Guideline

Patient Characteristics RCTs, systematic reviews and meta analyses, observational studies.

Intervention

Comparisons Provided evidence-based recommendations for preventing VTE during pregnancy and following labour. (See evidence summaries for further details).

Study Length

Outcomes Not stated.

Effect

Funding

Conclusions Evidence-based guideline on the prevention of VTE during pregnancy and following vaginal delivery. MEDLINE (1966-2002) using major search headings: venous thromboembolism, thrombosis, pregnancy, postpartum, puerperium, antenatal and prenatal.

Quality

RID: 922 **Reference number** 2818

Royal College of Obstetricians and Gynaecologists.;
Thromboprophylaxis during pregnancy, labour and after vaginal delivery.

2004 Guideline Royal College of Obstetricians and Gynaecologists Press pgs

Study Type: Guideline

Patient Characteristics RCTs, systematic reviews and meta analyses.

Intervention

Comparisons Provided evidence-based recommendations for managing VTE during pregnancy and the puerperium. (See evidence summaries for further details).

Study Length

Outcomes Not stated.

Effect

Funding

Conclusions Evidence-based guideline on the investigation and management of VTE in pregnancy and the puerperium.

Quality

RID: 1517 **Reference number** 2723

Scottish Programme for Clinical Effectiveness in Reproductive Health;
Scottish Obstetric Guidelines and Audit Project. The Management of Postpartum Haemorrhage.

1998 **pgs**

Study Type: Systematic Review
Patient Characteristics NA
Intervention Systematic review of the literature
Comparisons Comparison of studies related to PPH
Study Length NA
Outcomes NA
Effect NA
Funding NHS Scotland
Conclusions Blood loss of 500-1000 mls in the absence of clinical signs of shock prompts basic measures of monitoring whereas a perceived loss of >1000 mls or a smaller loss associated with signs of shock including hypotension, tachycardia, tachypnoea, oliguria or delayed peripheral capillary filling, prompts full protocol of resuscitation, monitoring and arrest of bleeding.
Quality

RID: 915 **Reference number** 2723

Scottish Programme for Clinical Effectiveness in Reproductive Health;
Scottish Obstetric Guidelines and Audit Project. The Management of Postpartum Haemorrhage.

1998 SPCERH **pgs**

Study Type: Systematic Review
Patient Characteristics RCTs, cohort studies, case-control studies
Intervention Provided evidence-based recommendations for preventing and managing PPH. (See evidence summaries for further details).
Comparisons
Study Length Clinical and Resource and Audit Group of the SODoH.
Outcomes Evidence-based clinical practice guideline to aid healthcare professionals in preventing and managing postpartum haemorrhage
Effect
Funding
Conclusions
Quality

Grading: ***1+*** ***Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias***

RID: 923 **Reference number** 2821

Schuurmans N;MacKinnon C;Lane C;Etches D;
SOGC Clinical Practice Guidelines. Prevention and Management of Postpartum Haemorrhage

2000 22 4 J Soc Obstet Gynaecol Can **pgs** 271 281

Study Type: Systematic Review

Patient Characteristic Included studies on prevention, interventions and management of PPH (English full text articles and abstracts of non-English papers)

Intervention

Comparisons Provided evidence-based recommendations for preventing and managing PPH. (See evidence summaries for further details).

Study Length

Outcomes

Effect

Funding Clinical Practice Obstetrics Committee

Conclusions Society of Obstetricians and Gynaecologists clinical practice guidelines to aid clinicians in preventing and managing postpartum haemorrhage

Quality

Grading: *2++ High-quality systematic reviews of case–control or cohort studies High-quality case–control or*

RID: 911 **Reference number** 2709

Cluett ER;Alexander J;Pickering RM;

What is the normal pattern of uterine involution? An investigation of postpartum uterine involution measured by the distance between the symphysis pubis and the uterine fundus using a paper tape measure

1997 13 1 Midwifery **pgs** 9 16

Study Type: Other Observational

Patient Characteristic PP women ; primips at 37-42 weeks gestation; SVD; single healthy baby; self caring mother; delivery at unit where recruitment occurred and living within city limits

Intervention S-FD measurements obtained by one investigator daily between 12:30-6pm until fundus no longer palpable.

Comparisons Number of days to complete uterine involution.

Study Length Up to 22 days pp

Outcomes Days until uterine fundus not palpable

Effect Day uterus no longer palpable averaged day 16. However the pattern of decline between women and in terms of the daily rate of decline was quite variable

Funding Unknown

Conclusions Highlights variability of uterine involution. Small study.

Quality

RID: 840 **Reference number** 325

Ray JG;Chan WS;

Deep vein thrombosis during pregnancy and the puerperium: A meta- analysis of the period of risk and the leg of presentation

1999 54 4 Obstetrical & Gynecological Survey **pgs** 265 271

Study Type: Metaananalysis

Patient Characteristic Cohort studies describing 10 or more cases of DVT during pregnancy or puerperium and providing data on either the trimester of presentation and/or the leg in which DVT was s diagnosed. 18 studies identified (n=723). 4/18 studies relied on the clinical examination alone to make a diagnosis of DVT rather than objective testing (e.g. impedance plethysmography).

Intervention

Comparisons Weighted event rate for left-sided/bilateral DVT was 77.2% (95% CI 69.7-83.3) compared with 21.5% (95% CI 15.3-29.2). (authors pooled together rates for left-sided and bilateral DVT because 1) their principal question (pre hoc) was whether left-sided dise

Study Length

Outcomes Not stated

Effect

Funding

Conclusions Meta analysis of published studies of DVT during pregnancy and the puerperium. Aims: 1) In which leg is there a higher incidence of disease? and 2) when is DVT likely to present during pregnancy or the puerperium?

Quality

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 905 **Reference number** 2687

Atterbury JL;Groome LJ;Hoff C;Yarnell JA;

Clinical presentation of women readmitted with postpartum severe preeclampsia or eclampsia

1998 27 2 J Obstet Gynecol Neonatal Nursing **pgs** 134 141

Study Type: Case-Control

Patient Characteristics ---

Intervention

Comparisons Eclamptic women prepartum and postpartum

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Incidence and Signs and symptoms Comparion of incidence of post-partum pre-eclampsia versus postpartum eclampsia was 60.4% and 39.6%, respectively. Neurological symptoms occurred more frequently in postpartum severe pre-eclamptic and eclamptic women compared with case control matched severe pre-eclamptic and eclamptic women during pregnancy.

Quality

RID: 953 **Reference number** 4397

Combs CA;Murphy EL;Laros RK;

Factors associated with postpartum hemorrhage with vaginal birth

1991 77 1 Obstetrics & Gynecology **pgs** 69 76

Study Type: Case-Control

Patient Characteristic Postnatal women who had vaginal births between January 1978 and December 1988.Moffitt Hospital, USA

Intervention

Comparisons Risk factors: abnormal first, second or third stage of labour, pre-eclampsia, episiotomy, previous postpartum haemorrhage, twins, arrest of descent, soft-tissue lacerations, augmented labour, delivery method, ethnicity, parity, accoucheur, previous caesar

Study Length

Outcomes Postpartum haemorrhage

Effect

Funding IBM, NIH Training Grant HD07-162 (Dr. Combs)Charles E. Culpeper Foundation Medical Scholarship (Dr. Murphy)

Conclusions Risk factors associated with PPH:prolonged third stage of labour: OR 7.56 (95%CI 4.23-13.53; p<.0001)pre-eclampsia: OR 5.02 (95%CI 2.98-8.47; p<.0001)episiotomy: mediolateral= OR 4.67 (95%CI 2.59-8.43; p<.001); midline= OR 1.58 (95%CI 1.12-2.23; p<.05)previous PPH: OR 3.55 (95%CI 1.24-10.19 p<.05)twins: OR 3.31 (95%CI 1.03-10.60; p<.05)arrest of descent: OR 2.91 (1.59-5.32; p<.01)soft-tissue lacerations: OR 2.05 (95%CI 1.45-2.90; p<.001)augmented labour: OR 1.66 (95%CI 1.23-2.25p<.01)forceps/vacuum delivery: OR 1.66 (95%CI 1.06-2.60; p<.05)ethnicity: Asian=OR 1.73 (95%CI 1.20-2.49; p<.01); Hispanic=OR 1.66 (95%CI 1.02-2.69 p<.05)nulliparity: OR 1.45 (95%CI 1.05-2.00; p<.05). Sample power: 80% probability of detecting a significant association with an OR>2.

Quality

OBS

RID: 916 **Reference number** 2731

Flanc C;Kakkar VV;Clarke MB;

The detection of venous thrombosis of the legs using 125-I-labelled fibrinogen

1968 55 10 British Journal of Surgery **pgs** 742 747

Study Type: Intervention Study -Non randomised

Patient Characteristics 65 surgical patients randomly selected; 31 patients who presented with clinical signs of DVT

Intervention Patients give fibrinogen prior to surgery or if complaining of symptoms

Comparisons Positive scan to clinical symptoms

Study Length Post op hospitalization

Outcomes Frequency percents

Effect Among postop patients with confirmed DVT only 50% had clinical signs.

Funding Kings College and Pfizer Ltd

Conclusions Small study but bias limited as phlebography was used to confirm results. Clinical signs and symptoms not reliable.

Quality

RID: 828 **Reference number** 7

Gherman RB;Goodwin TM;Leung B;Byrne JD;Hethumumi R;Montoro M;

Incidence, clinical characteristics, and timing of objectively diagnosed venous thromboembolism during

1999 94 5 Pt 1 Obstetrics & Gynecology **pgs** 730 734

Study Type: Cohort

Patient Characteristics PP cases with objective evidence of DVT or PE

Intervention Chart review for incidence, clinical characteristics and timing

Comparisons NA

Study Length Review of hospital record

Outcomes % for risk factors, presenting S&S

Effect Pain, tenderness and unilateral leg swelling present in 85.7% of patients with DVT. Enlarged leg was measured in 75% of cases, slightly fewer than half had Homan's sign.

Funding NA

Conclusions This study stands in contrast to other studies of DVT which indicate that only about half of

patients had clinical signs. However, Homan's seems to be only about 50% predictive in this study.

Quality

RID: 950 **Reference number** 4384

Gibbs RS;Jones PM;Wilder CJ;

Internal fetal monitoring and maternal infection following cesarean section. A prospective study

1978 52 2 Obstetrics & Gynecology **pgs** 193 197

Study Type: Cohort

Patient Characteristics Post caesarean patients followed for infection

Intervention

Comparisons

Study Length

Outcomes P-values for factors associated with post C-section infection: age, p<.01; getational age p=.05; labor duration p<0.001; ROM duration p<0.001; IFM duration p<0.005; vaginal exam p<0.005.

Effect

Funding NIH

Conclusions Findings of this study may be considered in the analysis of risk factors for endometritis in vaginal delivery. Prevalance = 39.6%

Quality

RID: 908 **Reference number** 2694

Gilbert L;Porter W;Brown VA;

Postpartum haemorrhage--a continuing problem

1987 94 1 British Journal of Obstetrics & Gynaecology **pgs** 67 71

Study Type: Cohort

Patient Characteristic Women having singleton vaginal deliveries. Nether Edge Maternity Unit, UK (August 1984 to January 1985)

Intervention

Comparisons Risk factors: age, parity, mode of onset of labour, duration of 1st , 2nd and 3rd stage, mode of delivery

Study Length

Outcomes Postpartum haemorrhage (PPH)

Effect

Funding Significant risk factors associated with PPH (blood loss >500ml) were: All deliveries Parity (primiparous): $\chi 2$ 38.7, df 1, p<0.001Induced labour (by amniotomy/oxytocin): $\chi 2$ 36.5, df 2, p<0.001Prolonged 1st stage: $\chi 2$ 29.64, df 3, p<0.001Duration of 2nd s

Conclusions :Prospective study.Methodological limitation: did not adjust for multiple testing, potential selection bias (did not state whether assessment of outcome was made blind to exposure).

Quality

RID: 1516 **Reference number** 2694

Gilbert L;Porter W;Brown VA;

Postpartum haemorrhage--a continuing problem

1987 94 1 **pgs** 67 71

Study Type: Case-Control

Patient Characteristic 86 cases were women delivery at Nether Edge Maternity Unit who had blood loss >500 cc and the cases were from the same hospital with blood loss >350cc.

Intervention Risk factor analysis which also characterizes a method of evaluating blood loss

Comparisons Risk of PPH cases vs controls for various obstetric factors

Study Length During pp hospitalization

Outcomes Amount of post delivery bleeding

Effect Risk factors analyzed with % differences, x2 and p values.

Funding Unknown

Conclusions This study was included because the methodology highlights the difficulty of measuring PPH accurately.

Quality

RID: 907 **Reference number** 2693

Hall MH;Halliwell R;Carr-Hill R;

Concomitant and repeated happenings of complications of the third stage of labour

1985 92 7 British Journal of Obstetrics & Gynaecology **pgs** 732 738

Study Type: Cohort

Patient Characteristics Women with one or more live vaginal births between 1967 and 1981(Aberdeen City District)

Intervention

Comparisons Risk factors: parity, induction of labour.Incidence of retained placenta and PPH.Repetition of RP and PPH following: Two consecutive singleton live births, three consecutive singleton live births, one abortion followed by two singleton live births and two

Study Length

Outcomes PPH (blood loss>500ml)Retained placenta (placenta requiring manual removal)

Effect

Funding PPH more common in primiparae (p<0.01).Higher incidence of RP and/or PPH in primiparae (p<0.01).Higher rate of PPH with induced labour (5.2% vs. 3.1%).PPH occurs more often when there is a retained placenta (x3 more).Incidence of PPH: 2-2.6% (1967-1972);

Conclusions Methodological limitations: Did not consider potential confounders.

Quality

RID: 918 **Reference number** 2733

Jackson P;

Puerperal thromboembolic disease in 'high risk' cases

1973 1 5848 Brit Med J **pgs** 263 264

Study Type: Intervention Study -Non randomised

Patient Characteristics Three groups of patients – 44 undergoing BTL; 36 delivered by C-section; 20 age 30 or more.

Intervention Doppler ultrasound flow detection carried out. With 125I-labelled fibrinogen.

Comparisons Comparative scan techniques and comparison to clinical signs

Study Length Until hospital discharge

Outcomes Frequency

Effect Signs of DVT present in 13 women with normal scan. One patient with DVT developed calf pain and tenderness 48 hours after the scan became positive in the calf.

Funding NA

Conclusions Small study of low incidence of DVT. Clinical signs and symptoms not reliable.

Quality

RID: 951 **Reference number** 4391

Killian CA;Graffunder EM;Vinciguerra TJ;Venezia RA;

Risk factors for surgical-site infections following cesarean section

2001 22 10 Infection Control & Hospital Epidemiology **pgs** 613 617

Study Type: Cohort

Patient Characteristics Post caesarean patients followed for incisional infection and endometritis for 30 days post-op

Intervention

Comparisons

Study Length

Outcomes OR for endometritis risk factors: absence of antibiotic prophylaxis (OR, 2.58, CI 1.3-5.1); fewer than seven prenatal visits (OR 5.59, CI 2.28-13.7); active labor or ruptured membranes (OR 2.30, CI 1.09-4.82).

Effect

Funding Dept. of Epidemiology, Albany Medical Center, Albany, NY

Conclusions Study sample size is small. Findings of this study may be considered in the analysis of risk factors for endometritis in vaginal delivery. Prevalance = 5.1% diagnosed with endometritis

Quality

RID: 917 **Reference number** 2732

Negus D;Pinto DJ;Le Quesne LP;Brown N;Chapman M;

125-I-labelled fibrinogen in the diagnosis of deep-vein thrombosis and its correlation with phlebography

1968 55 11 British Journal of Surgery **pgs** 835 839

Study Type: Intervention Study -Non randomised

Patient Characteristics 93 volunteers who were undergoing major surgery

Intervention Patients investigated by the 125fibrinogen uptake method

Comparisons Positive scan, clinical symptoms and DVT.

Study Length Post op hospitalization.\ \Post mortem exams were done on patients who died.

Outcomes Frequency percent

Effect Only 6 of 32 patients with increased uptake of fibrinogen had physical signs of any sort and these appeared 2 or more days after the thrombosis was detected.

Funding NA

Conclusions Small study but bias limited as phlebography was used to confirm results. Clinical signs and symptoms not reliable.

Quality

RID: 826 **Reference number** 5

Nicolaides AN;Kakkar VV;Field ES;Renney JT;

The origin of deep vein thrombosis: a venographic study

1971 44 525 British Journal of Radiology **pgs** 653 663

Study Type: Intervention Study -Non randomised

Patient Characteristics 127 consecutive patients. 97 referred due to suspected DVT and 30 had varicose veins.

Intervention Use of ascending functional phlebography techniques

Comparisons Comparative scan techniques and comparison to clinical signs

Study Length Post op period

Outcomes .Frequency percents

Effect Only 50% of those with thrombi had any clinical signs

Funding Pfizer Ltd

Conclusions Small study but bias limited as phlebography was used to confirm results. Clinical signs and symptoms not reliable.

Quality

RID: 885 **Reference number** 1389

Suonio S;Saarikoski S;Vohlonen I;Kauhanen O;

Risk factors for fever, endometritis and wound infection after abdominal delivery.

1989 29 2 International Journal of Gynaecology & Obstetrics **pgs** 135 142

Study Type: Cohort

Patient Characteristics ---

Intervention

Comparisons

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Research definition of endometritis.

Quality

RID: 890 **Reference number** 1922

Waterstone M;Bewley S;Wolfe C;

Incidence and predictors of severe obstetric morbidity: case-control study

2001 322 British Medical Journal **pgs** 1089 1094

Study Type: Case-Control

Patient Characteristic Women delivering >24 weeks' gestation 19 maternity units in S. Thames region.(1 March 1997-28 February 1998)

Intervention

Comparisons Risk factors: age, blood pressure at booking, ethnicity, social exclusion, smoking, previous PET or PPH, hypertension, diabetes, multiple pregnancy, antenatal admission, taking iron, antiepileptics or antidepressants at booking, induction of labour (IOL)

Study Length

Outcomes Severe pre-eclampsiaEclampsiaSevere haemorrhageSevere sepsisHaemolysis, elevated liver enzymes (HELLP) syndrome

Effect

Funding MW funded by Research and Development Dept. of S. Thames NHS Executive

Conclusions Significant risk factors associated with severe haemorrhage (blood loss >1500ml, haemoglobin drop ≥40 g/l or transfused ≥4 units of blood) were:Age ≥ 35 years: OR 1.41 (95% CI 1.03-1.95)Blood pressure at booking: OR 1.18 (95% CI 1.06-1.31)Ethnicity (not Black or White): OR 1.82 (95% CI 1.09-3.03)Social exclusion: OR 2.91 (95% CI 1.76-4.82)Smoking: OR 0.65 (95% CI 0.44-0.96)Previous PPH: OR 2.74 (95% CI 1.69-4.44)Multiple pregnancy: OR 2.29 (95% CI 1.20-4.37)Antenatal admission: OR 1.85 (95% CI 1.39-2.47)Taking iron at booking: OR 5.98 (95% CI 2.28-15.65)Taking antiepileptics at booking: OR 5.75 (95% CI 1.28-25.72)Taking antidepressants at booking: OR 10.55 (95% CI 2.19-50.71)Oxytocin augmentation: OR 1.61

(95% CI 1.20-2.15)Manual removal of placenta: OR 13.12 (95% CI 7.72-22.30)Emergency caesarean.: OR 3.09 (95% CI 2.29-4.17). The incidence of severe obstetric morbidity was 12.0/1000 deliveries..Excluded thromboembolic disease because of variability in diagnosis when the condition is not fatal.

Quality
OBS

Grading: *2- Case–control or cohort studies with a high risk of confounding bias, or chance and a significant*

RID: 913 **Reference number** 2718
Bergstrom S;Libombo A;
Puerperal measurement of the symphysis-fundus distance
1992 34 2 Gynecologic & Obstetric Investigation **pgs** 76 78

Study Type: Cohort
Patient Characteristics Group 1: pp women with clinical endometritis in hospital; Group 2 healthy pp women in hospital matched for age, parity and days after delivery; Group 3 69randomly selected pp women in community.
Intervention Symphysis fundus measurement
Comparisons Fundal height of women with infection to healthy women
Study Length Up to 19 days pp in outpatient group
Outcomes T test to compare mean values
Effect Difference between group 1 and 2 SF distance not significant. (t test result not given)
Funding Unknown
Conclusions This is a developing world study. The authors conclude that endometritis does not provoke significantly increased fundal height in the pp woman as compared to normal pp woman.
Quality

RID: 906 **Reference number** 2691
Chames MC;Livingston JC;Ivester TS;Barton JR;Sibai BM;
Late postpartum eclampsia: a preventable disease?
2002 186 6 Am J Obstet Gynecol **pgs** 1174 1177

Study Type: Other Observational
Patient Characteristics ---
Intervention
Comparisons ---
Study Length
Outcomes ---
Effect
Funding
Conclusions Signs and symptoms of pre-eclampsia and eclampsia Neurological symptoms occurred more frequently in postpartum eclamptic patients compared with prepartum patients. The study was not case controlled.
Quality

RID: 825 **Reference number** 3

Gilstrap LC;Cunningham FG;
The bacterial pathogenesis of infection following cesarean section

1979 53 5 Obstetrics & Gynecology **pgs** 545 549

Study Type: Cohort

Patient Characteristics: ROM >6 hours

Intervention:

Comparisons:

Study Length:

Outcomes: Not stated

Effect:

Funding: University of Texas Health Science Center

Conclusions: Incidental report of infection after vaginal delivery in study of bacterial pathogenesis of infection following cesarean section. Prevalance = <10%

Quality:

RID: 948 **Reference number** 4330

Newton ER;Prihoda TJ;Gibbs RS;
A clinical and microbiologic analysis of risk factors for puerperal endometritis

1990 75 3 Pt 1 Obstetrics & Gynecology **pgs** 402 406

Study Type: Cohort

Patient Characteristics: In labour with ROM >10 hours and no clinical signs or symptoms of infection

Intervention:

Comparisons:

Study Length:

Outcomes: C-section RR12.8 PAR 71%; Gm-negative rods RR 2.9 PAR 9%; Prophylactic antibiotics RR 2.5 PAR 10%; Mycoplasma hominis RR 1.4 PAR 8%; Group B strep RR 1.4 PAR 4%.

Effect:

Funding: NIH

Conclusions: Risk of pp endometritis is higher in women who have had C-section, did not receive prophylactic antibiotics and who had evidence of BV in amniotic fluid. The remaining conclusions regarding other risk factors traditionally associated with endometritis are questionable due to high risk study population. Prevalance = 16.5%

Quality:

RID: 892 **Reference number** 2373

Seo K;McGregor JA;French JI;
Preterm birth is associated with increased risk of maternal and neonatal infection

1992 79 1 Obstetrics & Gynecology **pgs** 75 80

Study Type: Cohort

Patient Characteristic: Patients who delivered singletons without history of antepartum and/or intrapartum infection or medical induction of labour.

Intervention:

Comparisons:

Study Length:

Outcomes: P <.05 if delivered by cesarean after PROM

Effect:

Funding: Antibiotic treatment of chorioamnionitis a possible confounder

Conclusions Endometritis significantly increased only in women with PPROM delivered by c-section. Antibiotic use may be a confounder.

Quality

RID: 952 **Reference number** 4395

Stones RW;Paterson CM;Saunders NJ;

Risk factors for major obstetric haemorrhage

1993 48 1 European Journal of Obstetrics Gynecology and Reproductive Biology **pgs** 15 18

Study Type: Cohort

Patient Characteristics Postnatal women NHS Maternity units in NW Thames region, UK (1988)

Intervention

Comparisons Risk factors: multiple and singleton pregnancies, age, BMI, muliparity, smoking, anaemia, hypertension, non- and proteinuric PIH, eclampsia, indeterminate antepartum haemorrhage, proven abruption, praevia with +/- bleeding, episiotomy, induced labour, ret

Study Length

Outcomes major obstetric haemorrhage

Effect

Funding Not stated

Conclusions Significant intrinsic and extrinsic risk factors associated with major obstetric haemorrhage (blood loss >1000ml) were:Intrinsic Placental abruption: RR 12.6 (99%CI 7.61-20.9) Placenta praevia: RR 13 (7.47-23) Multiple pregnancy: RR 4.46 (99% CI 3.01-6.61) Obesity: RR 1.64 (99% CI 1.24-2.17) Extrinsic Retained placenta: RR 5.15 (99% CI 3.36-7.87)Induced labour: RR 2.22 (99% CI 1.67-2.96) Episiotomy: RR 2.06 (99% CI 1..36-3.11)Birthweight >4kg: RR 1.90 (99% CI 1.38-2.60)Oxytocin-induced labour: RR 1.67 (99% CI 1.67-2.95)Emergency C-section vs. elective C-section: RR 2.24 (99% CI 1.43-3.53)Emergency C-section vs. spontaneous delivery: RR 8.84 (99% CI 6.74-11.6)Emergency C-section vs. operative vaginal delivery: RR 3.71 (99% CI 2.54-5.42)Elective C-section vs. spontaneous vaginal delivery: RR 3.94 (99% CI 2.52-6.17)Operative vaginal delivery vs. spontaneous delivery: RR 2.39 (99% CI 1.64-3.48)Pyrexia in labour (>38oC): RR 2.02 (99% CI 1.03-3.97)Prolonged labour (>12h): RR 1.98 (99% CI 1.37-2.87). Additional comments:Methodological limitations: retrospective study, potential selection bias (did not state whether assessment of outcome was made blind to exposure) and did not control for poten-tial confounding factors (e.g. ethnicity, age), did not adjust for multiple testing. Although authors stated that they used 99% CI to eliminate spurious associations.

Quality

Obs

Grading: *3 Non-analytic studies (for example, case reports, case series)*

RID: 893 **Reference number** 2375

Douglas KA;Redman CW;

Eclampsia in the United Kingdom

1994 309 6966 Brit Med J **pgs** 1395 1400

Study Type: Cohort
Patient Characteristics ---
Intervention
Comparisons ---
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Incidence Survey examining incidence of postpartum eclampsia in UK in 1992. % of eclamptic cases that were postpartum was 44%
Quality

RID: 880 **Reference number** 1253
Lubarsky SL;Barton JR;Friedman SA;Nasreddine S;Ramadan MK;Sibai BM;
Late postpartum eclampsia revisited.
1994 83 4 Obstetrics & Gynecology **pgs** 502 505
Study Type: Case Series
Patient Characteristics ---
Intervention
Comparisons ---
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Incidence 15 year study (1977-1992) in USA. % of eclamptic cases that were postpartum was 27%
Quality

RID: 1537 **Reference number** 4472
Marchant S;Alexander J;Garcia J;
One small drop in the ocean:blood loss in the postnatal period the development and pilot tests of information leaflets for women about vaginal blood loss after childbirth (BliPP2)
2001 11 1 Supp **pgs** s9 s13
Study Type: Qualitative
Patient Characteristics Postpartum women
Intervention Explore informational needs regarding vaginal loss
Comparisons NA
Study Length NA
Outcomes Frequency percents
Effect 83% found information reassuring
Funding NHS Executive Research and Development Committee
Conclusions Highlights need for information and receptivity to health education
Quality

RID: 889 **Reference number** 1861

Marchant S;Alexander J;Garcia J;

Postnatal vaginal bleeding problems and general practice

2002 18 1 Midwifery **pgs** 21 24

Study Type: Other Observational

Patient Characteristic Women who gave birth in the two study districts during the recruitment period; GP practices in study districts reporting on women in study.

Intervention Questionnaire

Comparisons Diary of vaginal loss and GP consultation and treatment for problems with lochial loss

Study Length 28 days pp – 3 mos. After birth

Outcomes Frequency

Effect One fifth of women sampled reported problems with lochial loss after 28 days and just under half of those sought help from their GP

Funding NHS Executive R&D

Conclusions Survey with low response rate especially from GP practices. Suggests that a substantial number of women consider that they experience excessive and/or prolonged bleeding after their birth. Recommendation that women and health care professionals need further information about this problem.

Quality

RID: 945 **Reference number** 4302

Mousa HA;Alfirevic Z;

Major postpartum hemorrhage: survey of maternity units in the United Kingdom

2002 81 8 Acta Obstetricia et Gynecologica Scandinavica **pgs** 727 730

Study Type: Qualitative

Patient Characteristics a. Postal questionnaire sent to 258 UK maternity units to assess:current definition of major PPHtreatment of PPH, surgical procedures for PPH methods of thromboprophylaxis following surgery.

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Not stated

Conclusions

Quality

RID: 910 **Reference number** 2705

Takahashi H;

Clinical. Evaluating routine postnatal maternal temperature check

1998 6 3 BR J MIDWIFERY **pgs** 139 143

Study Type: Other Observational

Patient Characteristics PP women delivered in 1990 in the John Radcliffe Hospital in Oxford

Intervention Record review of variations in temperature taking. Observation of temperature values and methods of taking temperature.

Comparisons Comparison of temperature values and records of subsequent infection.

Study Length PP hospitalization

Outcomes Sensitivity and specificity calculations

Effect Sensitivity at all three cut off points was less than 40%

Funding Unknown

Conclusions The reliability of the practice of measurement of maternal body temperature is questionable. The study is small and not carefully designed. These findings should be further investigated.

Quality

Grading: *4 Expert opinion, formal consensus*

RID: 931 **Reference number** 2851

Bick D;MacArthur C;Knowles H;Winter H;

Postnatal Care. Evidence and Guidelines for Management.

2002 Churchill Livingstone **pgs**

Study Type: Systematic Review

Patient Characteristics Studies on identification and management of endometritis, abnormal blood loss, perineal pain, dyspareunia, caesarean section wound care and pain relief, breastfeeding, urinary problems, bowel problems, depression and other psychological morbidity, fatigue, backache and headache relevant to community midwifery practice or, if none identified, relevant to hospital-based care. Articles in English and published from 1950s.

Intervention

Comparisons 10 evidence-based guidelines for the management of physical and psychological postnatal health problems.

Study Length

Outcomes

Effect

Funding NHS R&D Health Technology Assessment Programme.

Conclusions Evidence-based clinical guidelines that formed part of an RCT (Implementing Midwifery-led Postnatal Care Trial; IMPaCT) on a new model of midwifery-led postnatal care. Comprehensive literature search.

Quality

RID: 903 **Reference number** 2680

D'Angelo LJ;Sokol RJ;

Time-related peripartum determinants of postpartum morbidity

1980 55 3 Obstetrics & Gynecology **pgs** 319 323

Study Type: Cohort

Patient Characteristics ---

Intervention

Comparisons

Study Length

Outcomes ---

Effect

Funding NIH & Eli Lilly Co.

Conclusions Research definition of endometritis.

Quality

RID: 1538 **Reference number** 4547

Royal College of Obstetricians and Gynaecologists;

Pre-eclampsia - study group recommendations

2003 http://www rcog org uk/mainpages asp?PageID=1215 **pgs**

Study Type: Guideline

Patient Characteristics ---

Intervention ---

Comparisons ---

Study Length

Outcomes Referral pathways NB systematic reviews on referral pathways have not been published in the literature

Effect

Funding

Conclusions

Quality

RID: 1064 **Reference number**

World Health Organization;

Managing Complications in Pregnancy and Childbirth: a guide for midwives and doctors

2003 **pgs**

Study Type: Guideline

Patient Characteristics ----

Intervention

Comparisons

Study Length

Outcomes ----

Effect

Funding ----

Conclusions Signs and symptoms of metritis

Quality

RID: 980 **Reference number** 4946

World Health Organization;

Managing Complications in Pregnancy and Childbirth: a guide for midwives and doctors

2003 World Health Organization **pgs**

Study Type: Guideline

Patient Characteristics ---

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding

Conclusions Signs and symptoms of pre-eclampsia and eclampsia

Quality

56 Debriefing

Grading: *1++* *High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 1035 **Reference number** 4995

Rose S;Bisson J;Wessely S;

Psychological Debriefing for preventing Post Traumatic Stress Disorder (PTSD)

2001 John Wiley & Sons Ltd **pgs**

Study Type: Systematic Review

Patient Characteristics ---

Intervention ---

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions No evidence that single session debriefing reduces psychological distress nor prevents the onset of PTDS.

Quality

RID: 1036 **Reference number** 4731

Scottish Intercollegiate Guidelines Network (SIGN);

Postnatal depression and puerperal psychosis

2002 60 Scottish Intercollegiate Guidelines Network **pgs**

Study Type: Systematic Review

Patient Characteristics ---

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding Clinical Resource and Audit Group of the Scottish Executive Health Department

Conclusions Signs and symptoms of depression. Risk factors.

Quality

Grading: *1+* *Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 1011 **Reference number** 4918

Gamble JA;Creedy DK;Webster J;Moyle W;

A review of the literature on debriefing or non-directive counselling to prevent postpartum emotional distress

2002 18 1 Midwifery **pgs** 72 79

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions This systematic review looked at three RCTs. The two largest RCTs (n=1745 and n=872)indicate that a single debriefing session in the postnatal ward is of no statistically significant value in reducing psycholollgical morbidity and may even be harmful.However the researchers conclude that there is insufficient evidence to draw conclusions about the effectiveness of debriefing followin childbirth because it is not clear that a standardised method

Quality + Unclear if standardised debriefing intervention was used

RID: 1028 **Reference number** 4925

Midmer D;Wilson L;Cummings S;

A randomized, controlled trial of the influence of prenatal parenting education on postpartum anxiety and marital adjustment

1995 27 3 Family Medicine **pgs** 200 205

Study Type: Randomised Controlled Trial

Patient Characteristics Pregnant women and their partners

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Educational intervention of two classes (3 hours each) in the prenatal period significantly reduced state anxiety at 6 weeks ($p < 0.05$) and 6 months postpartum ($p < 0.05$).

Quality

Grading: *2++* *High-quality systematic reviews of case–control or cohort studies High-quality case–control or*

RID: 976 **Reference number** 4923

Kennerley H;

Maternity blues: III. Associations with obstetric, psychological, and psychiatric factors

1989 155 Sep British Journal of Psychiatry **pgs** 367 373

Study Type: Cohort

Patient Women assessed at 14-16 weeks prenatal, weeks 36-38 of pregnancy, 10 days postpartum, week

Characteristic 12 of puerperium

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Postpartum blues associated with poor family and/or marital relationships ($p < 0.05$) anxiety ($p < 0.001$) and prenatal neuroticism score ($p < 0.001$). Type of delivery, obstetric morbidity, history of psychiatric illness were not associated with postpartum blues.

Quality

Prospective cohort study

RID: 987 **Reference number** 4953

Kennerley H;Gath D;

Maternity blues. I. Detection and measurement by questionnaire

1989 155 Br J Psychiatry **pgs** 356 362

Study Type: Cohort

Patient Newly delivered women interviewed in the first ten days postpartum

Characteristics

Intervention

Comparisons 49 symptoms of psycho-logical state

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Cluster analysis identified 7 symptoms associated with ‘primary blues’, namely; Tearfulness Fatigue Anxiety Feeling overemotional Changeability in mood Low spiritedness Forgetfulness/muddled thinking.

Quality

Prospective cohort study

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 1052 **Reference number** 144

Ayers S;Pickering AD;

Do women get posttraumatic stress disorder as a result of childbirth? A prospective study of incidence

2001 28 2 Birth **pgs** 111 118

Study Type: Cohort
Patient Characteristics Women at 36 months gestation, 6 weeks and 6 months postpartum
Intervention
Comparisons ---
Study Length
Outcomes ---
Effect
Funding ---
Conclusions 2.8% of women fulfilled the criteria for PTSD at 6 weeks postpartum and this decreased to 1.5% at 6 months postpartum.
Quality
Prospective cohort study

RID: 1053 **Reference number** 4950
Ballinger CB;Buckley DE;Naylor GJ;Stansfield DA;
Emotional disturbance following childbirth: clinical findings and urinary excretion of cyclic AMP (adenosine 3'5'cyclic monophosphate)
1979 9 2 Psychological Medicine **pgs** 293 300
Study Type: Cohort
Patient Characteristics Postpartum women
Intervention
Comparisons Postpartum blues women and non postpartum blues women
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Poor family relationships ($p < 0.001$), problems in marital relationship ($p < 0.01$), problems in sexual relationship associated with postpartum blues ($p < 0.05$).
Quality
Prospective cohort study

RID: 1063 **Reference number** 4916
Czarnocka J;
Prevalence and predictors of post-traumatic stress symptoms following childbirth
2000 39 1 British Journal of Clinical Psychology **pgs** 35 51
Study Type: Cohort
Patient Characteristics Postpartum women within 72 hours post-delivery and 6 weeks postpartum
Intervention
Comparisons ---
Study Length
Outcomes ---
Effect
Funding ---
Conclusions 3% of women fulfilled the criteria for PTSD at 6 weeks postpartum. PTSD was associated with unplanned pregnancy ($p < 0.01$), no partner present at birth ($p < 0.001$), past mental health problems ($p < 0.05$), trait anxiety $p < 0.001$) and episiotomy during childbirth ($p < 0.05$). PTSD

was not associated with pain relief breech presentation, type of delivery, vaginal tear, use of induction, nature of onset of labour, method of monitoring process.

Quality
Prospective cohort study

RID: 1014 **Reference number** 4920
Hapgood CC;
Maternity blues: Phenomena and relationship to later post partum depression
1988 22 3 Australian & New Zealand Journal of Psychiatry **pgs** 299 306
Study Type: Cohort
Patient Characteristics Postpartum women
Intervention
Comparisons Assessment of mood (depression, tearfulness, anxiety, irritability) 34 weeks pre-natally. Postpartum: daily for 14 days, 6 weeks, 3 months, 6 months and 12 months
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Age, race, marital status, and socio-economic status were not risk factors for postpartum blues. Postnatal depression associated with blue symptom of lability.
Quality
Prospective cohort study

RID: 1021 **Reference number** 4581
Kendell RE;Chalmers JC;Platz C;
Epidemiology of puerperal psychoses
1987 150 British Journal of Psychiatry **pgs** 662 673
Study Type: Cohort
Patient Characteristics 120 psychiatric admissions to hospital within 90 days postpartum
Intervention
Comparisons Temporal relationship between psychiatric admissions and psychosis admissions
Study Length
Outcomes ---
Effect
Funding ---
Conclusions There were120 psychiatric admission within 90 days postpartum from 54 087 births. The distribution of admissions was studied in an 8 year period from 1972-1979. The analysis commenced 2 years before birth and 2 years postpartum. Psychosis admission peaked in the first month fell thereafter but remained significantly higher for 2 years compared with 2 year prenatal period.
Quality
Retrospective cohort study

RID: 1031 **Reference number** 4955

O'Hara MW;Schlechte JA;Lewis DA;Varner MW;
Controlled prospective study of postpartum mood disorders: psychological, environmental, and hormonal

1991 100 1 Journal of Abnormal Psychology **pgs** 63 73

Study Type: Cohort

Patient Characteristics Postpartum women

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Personal and family history of depression ($p < 0.01$), social adjustment ($p < 0.01$), stressful life events($p < 0.05$), and levels of free and total estriol ($p < 0.05$). Age, education and parity were not associated with postpartum blues.

Quality

Prospective cohort study

RID: 1032 **Reference number** 4578

Pfuhlmann B;Stober G;Franzek E;Beckmann H;
Cycloid psychoses predominate in severe postpartum psychiatric disorders

1998 50 2-3 Journal of Affective Disorders **pgs** 125 134

Study Type: Cohort

Patient Characteristics Women with severe postpartum psychiatric disorders admitted within 6 months postpartum

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Extensive case notes were made on all women followed by an extensive interview on the course of the illness to obtain a lifetime-diagnosis according to ICD-10 and Leonhard's classification. The illness began in the first week in the majority of women (56%). According to Leonhard's classification cycloid psychosis accounted for 54% of diagnosis, manic depression for 13%, schizophremnias for 10% and monopolar depression for 8%.

Quality

Retrospective cohort study

RID: 1046 **Reference number** 4931

Wijma K;Soderquist J;Wijma B;
Posttraumatic stress disorder after childbirth: a cross sectional study

1997 11 6 Journal of Anxiety Disorders **pgs** 587 597

Study Type: Cohort

Patient Characteristics Postpartum women 1 month to 13 months post-delivery

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions 1.7% women had symptoms of acute PTSD. PTSD was associated with primiparous women ((p = 0.003) and having received psychological counselling (p = 0.003). PTSD was not associated with age, education level, civil status, presence of partner at birth.

Quality

Prospective cohort study

RID: 1047 **Reference number** 4579

Wisner KL;Peindl K;Hanusa BH;

Symptomatology of affective and psychotic illnesses related to childbearing

1994 30 2 Journal of Affective Disorders **pgs** 77 87

Study Type: Cohort

Patient Characteristic Primary DSM-III Axis 1 diagnosis of non-psychotic affective disorders, psychotic affective disorders and non-affective psychosis

Intervention

Comparisons 21 post-partum psychotic 92 post-partum non -psychotic 96 control psychotic women 553 control women non-psychotic

Study Length

Outcomes ---

Effect

Funding ----

Conclusions Symptom patterns in women with childbearing-related onset illness and non-childbearing-related onset illness. Analysis of 64 components showed that women with childbearing related psychosis reported higher frequency of suicidal ideation (p = 0.002) and a higher score on the factor cognitive disorganization (p < 0.001). Increased motor activity was greater in childbearing related psychosis (p < 0.001).

Quality

Retrospective cohort study

Grading: *2- Case–control or cohort studies with a high risk of confounding bias, or chance and a significant*

RID: 1054 **Reference number** 4914

Barnett B;Parker G;

Possible determinants, correlates and consequences of high levels of anxiety in primiparous mothers

1986 16 1 Psychological Medicine **pgs** 177 185

Study Type: Cohort

Patient Characteristic Postpartum women 89 women with high anxiety 29 women with moderate anxiety 29 women with low anxiety

Intervention

Comparisons Obstetric, social and baby obstetric variables

Study Length

Outcomes ---

Effect

Funding ---

Conclusions High anxiety levels were associated with postpartum blues (p < 0.001), depression (p < 0.001) and migrant status (p < 0.01). No association found with age, social class, social support, or

prior obstetric history.

Quality

Prospective cohort study

RID: 1056 **Reference number** 209

Canals J;Esparo G;Fernandez-Ballart J;

How anxiety levels during pregnancy are linked to personality dimensions and sociodemographic factors

2002 33 2 Personality & Individual Differences **pgs** 253 259

Study Type: Cohort

Patient Characteristics Pregnant and then postpartum women

Intervention

Comparisons Anxiety before conception, in the 1st, 2nd and 3rd trimester, 3 days after delivery and 1 month after delivery

Study Length

Outcomes ---

Effect

Funding ---

Conclusions State anxiety peaked at day 3 following delivery and decreased at 1 month (although not statistically significant).

Quality

Prospective cohort study

RID: 1058 **Reference number** 46

Cox JL;Connor Y;Kendell RE;

Prospective study of the psychiatric disorders of childbirth

1982 140 British Journal of Psychiatry **pgs** 111 117

Study Type: Cohort

Patient Characteristics Pregnant and then postpartum women

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Anxiety increased during pregnancy (from 2nd to 3rd trimester), peaked at the first postpartum interview (within 10 days postpartum). At 3-5 months postpartum, anxiety fell to its lowest level.

Quality

Prospective cohort study

RID: 1062 **Reference number** 4915

Creedy DK;Spochet IM;Horsfall J;

Childbirth and the development of acute trauma symptoms: incidence and contributing factors

2000 27 2 Birth **pgs** 104 111

Study Type: Cohort

Patient Characteristics Postpartum women assessed at 4-6 weeks postpartum

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions 5.6% women had symptoms of acute PTSD. PTDS was associated with emergency caesarian section (p = 0.0001), forceps delivery section (p = 0.0001), high delivery pain section (p = 0.0001), vacuum delivery section (p = 0.003).

Quality

Prospective cohort study

RID: 1009 **Reference number** 264

Davidson JR;

Post-partum mood change in Jamaican women: A description and discussion on its significance

1972 Vol. 121 565 British Journal of Psychiatry **pgs** 659 663

Study Type: Cohort

Patient Characteristics Postpartum women

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Multiparous women had greater incidence of postpartum blues (p < 0.05).

Quality

Prospective cohort study

RID: 1010 **Reference number** 4917

Ehlert U;Patalla U;Kirschbaum C;Piedmont E;Hellhammer DH;

Postpartum blues: Salivary cortisol and psychological factors

1990 31 3 Journal of Psychosomatic Research **pgs** 319 325

Study Type: Cohort

Patient Characteristics Postpartum blues women and non postpartum blues women

Intervention

Comparisons 12 psychological factors

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Trait-anxiety (p < 0.005), passive coping strategies (p < 0.01),, marital dissatisfaction (p < 0.005), or non acceptance of their roles as mothers (p < 0.05) associated with postpartum blues.

Quality

Prospective cohort study

RID: 1012 **Reference number** 4919

Gard PR;

A multivariate investigation of postpartum mood disturbance

1986 148 British Journal of Psychiatry **pgs** 567 575

Study Type: Cohort

Patient Characteristics Postpartum women

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Primiparous women had greater incidence of postpartum blues ($p < 0.05$).

Quality

Prospective cohort study

RID: 1015 **Reference number** 173

Hau FW;Levy VA;

The maternity blues and Hong Kong Chinese women: an exploratory study

2003 75 2 Journal of Affective Disorders **pgs** 197 203

Study Type: Cohort

Patient Characteristics Postpartum women

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Symptoms peaked on day 5. Women aged 35-39 had a lower incidence of postpartum blues compared with women aged 18-34 ($p < 0.05$). Parity, education level and marital status not associated with postpartum blues.

Quality

Prospective cohort study

RID: 1065 **Reference number**

Ijuin T;Douchi T;Yamamoto S;Ijuin Y;Nagata Y;

The relationship between maternity blues and thyroid dysfunction

1998 **pgs**

Study Type: Case-Control

Patient Characteristics Recruited subjects from 279 women using Okano self rating scale Normal delivery

Intervention

Comparisons Maternity blue scores at 37 weeks prenatally, 5 days and 1 month postpartums

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Resolution of low mood/high anxiety/mild depression at 1 month.
Quality

RID: 1017 **Reference number** 4921
Ijuin T;Douchi T;Yamamoto S;Ijuin Y;Nagata Y;
The relationship between maternity blues and thyroid dysfunction
1998 24 1 Journal of Obstetrics & Gynaecology Research **pgs** 49 55
Study Type: Case-Control
Patient Characteristics Recruited subjects from 279 women using Okano self rating scale Normal delivery
Intervention
Comparisons Maternity blue scores
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Resolution of low mood/high anxiety/mild depression at 1 month.
Quality

RID: 985 **Reference number** 4951
Kendell RE;Mackenzie WE;West C;McGuire RJ;Cox JL;
Day-to-day mood changes after childbirth: further data
1984 145 Br J Psychiatry **pgs** 620 625
Study Type: Cohort
Patient Characteristics Postpartum women mood tested to day 10
Intervention
Comparisons Personality types: neuroticism, psychoticism, extraversion, lying
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Depression, tears and lability peaked on day 5 falling to day 10. Eysenck Personality Questionnaire showed neuroticism is associated with high score in symptoms on day 5 (depression $p < 0.01$, lability $p < 0.01$).
Quality
Prospective cohort study

RID: 986 **Reference number** 4952
Kendell RE;McGuire RJ;Connor Y;Cox JL;
Mood changes in the first three weeks after childbirth
1981 3 4 J Affect Disord **pgs** 317 326
Study Type: Cohort
Patient Characteristics Mood ratings scales completed daily to 21 days postpartum
Intervention

Comparisons Symptoms of tears, happiness, depression, anxiety, irritability, lability
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Depression postpartum ($p < 0.001$), tears and lability peaked on day 5 postpartum.
Quality
Prospective cohort study

RID: 1024 **Reference number** 277
Klompenhouwer JL;
The clinical features of postpartum psychosis
1995 10 7 European Psychiatry **pgs** 355 367
Study Type: Cohort
Patient Characteristic 250 puerperal psychosis admissions derived from 238 patients (12 patients admitted twice) within 3 months postpartum
Intervention
Comparisons Auditive hallucination, Optic hallucination, Misrecognition Mania, Depression, Formal thought disorder, Persecurtary delusions, Delusions of grandeur, Nihilistic delusions, Thematic delusions, Retardation, stupor, Agitative behavior and speech, Number of
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Prominent symptoms of puerperal psychosis were depersonalization, misrecognisation, themic delusions and kaleidoscopic picture (rapid shifts in the level of confusion, mood and psychotic symptoms).
Quality
Retrospective cohort study

RID: 990 **Reference number** 4956
Levy V;
The maternity blues in post-partum and post-operative women
1987 151 Br J Psychiatry **pgs** 368 372
Study Type: Cohort
Patient Characteristics 37 postpartum women, 28 women post major surgery, 22 women post minor surgery
Intervention
Comparisons Childbirth, major surgery, minor surgery mood comparison
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Postpartum symptoms peaked on days 3-4, and declined on days 5 and 6. Symptoms in the surgical groups declined progressively to day 6, without showing a peak.
Quality
Prospective cohort study

RID: 1029 **Reference number** 261
Nott PN;

Hormonal changes and mood in the puerperium

1976 128 Apr British Journal of Psychiatry **pgs** 379 383

Study Type: Cohort

Patient Characteristics Postpartum women

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Primiparous women had greater incidence of postpartum blues (9:4).

Quality

Prospective cohort study

RID: 988 **Reference number** 4954

O'Hara MW;Schlechte JA;Lewis DA;Wright EJ;

Prospective study of postpartum blues. Biologic and psychosocial factors

1991 48 9 Arch Gen Psychiatry **pgs** 801 806

Study Type: Cohort

Patient Characteristics Postpartum women

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Postnatal depression was positively associated with postpartum blues ($p < 0.01$).

Quality

Prospective cohort study

RID: 977 **Reference number** 4926

Pitt B;

Maternity blues.

1973 Vol. 122 569 British Journal of Psychiatry **pgs** 431 433

Study Type: Cohort

Patient Characteristics Postpartum women on wards (7th and 10th day)

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions 'Blues rating' and Maudsley Personality Inventory used to measure neuroticism and extraversion. 50% of 100 women diagnosed with postpartum blues. Anxiety ($p <0.001$) and confusion ($p<0.05$) were significantly associated with postpartum blues.

Quality
Prospective cohort study

RID: 1553 **Reference number** 250
Sholomskas DE;Wickamaratne P;
Postpartum onset of panic disorder: A coincidental event?
1993 54 12 **pgs** 476 480
Study Type: Cohort
Patient Characteristics Postparum women
Intervention
Comparisons Women with panic disorder Control women
Study Length
Outcomes ---
Effect
Funding ---
Conclusions Probability statistics showed that onset of panic disorder was not a coincidental event (co-occurrence probability 0.0092).
Quality
Retrospective cohort study

RID: 1041 **Reference number** 4929
Sostek AM;Scanlon JW;Abrason DC;
Postpartum contact and maternal confidence and anxiety: A confirmation of short-term effects
1982 5 Infant Behavior and Development **pgs** 323 329
Study Type: Cohort
Patient Characteristics Postpartum women
Intervention
Comparisons 6 women separated from baby for 1st 24 hours 28 women not separated from baby
Study Length
Outcomes ---
Effect
Funding ---
Conclusions 1 month postpartum, women separated from baby had increased anxiety ($p < 0.05$).
Quality
Prospective cohort study

RID: 1044 **Reference number** 254
Stein GS;
The pattern of mental change and body weight change in the first post- partum week
1980 24 3 Sup 4 Journal of Psychosomatic Research **pgs** 165 171
Study Type: Cohort
Patient Characteristics 18 primigravid women 19 multigravid women

Intervention

Comparisons Symptoms of crying, depression, restlessness, dreaming, irritability, headache, exhaustion, anorexia, poor concentration

Study Length

Outcomes ---

Effect

Funding ---

Conclusions 76% women experienced tearfulness (cf Pitt 1973: 50%). Depression, crying, headaches, dreaming, restlessness and irritability peaked around days 4-5. Severe postpartum blues occurred amongst women with a previous history of neurotic depression ($p < 0.01$), tearfulness in 3rd trimester ($p < 0.01$), no elation in 1st trimester ($p < 0.02$), previous postnatal depression (p

Quality

Prospective cohort study

RID: 1049 **Reference number** 262

Yalom ID;Lunde DT;Moos RH;Hamburg DA;

Postpartum blues syndrome. A description and related variables

1968 18 1 Archives of General Psychiatry **pgs** 16 27

Study Type: Cohort

Patient Characteristics Women assessed 1-3 weeks prior to birth, then daily for 10 days

Intervention

Comparisons Postpartum blues women and non postpartum blues women

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Primiparous women had greater incidence of tearfulness.

Quality

Prospective cohort study

Grading: *4 Expert opinion, formal consensus*

RID: 1051 **Reference number** 4913

ICEA position statement and review of postpartum emotional disorders

2003 18 3 International Journal of Childbirth Education **pgs** 35 43

Study Type: Reviews and Reports

Patient Characteristics ---

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Postpartum blues can be improved by a new mother using good self-care techniques and making use of support systems. These include; good nutrition, regular physical activity and sleep, developing of a support system, having realistic expectations of motherhood, taking breaks to rest, practicing deep breathing, expressing and accepting negative feelings, structuring of the day, nurturing a sense of humour and postponing major life changes.

Quality

RID: 1549 **Reference number** 5037

Jones HW;Venis JA;

Identification and classification of postpartum psychiatric disorders

2001 39 12 J Psychosoc Nurs Ment Health Serv **pgs** 23 30

Study Type: Reviews and Reports

Patient Characteristics ---

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Women with postpartum blues should be encouraged to seek further evaluation if symptoms persist beyond 7 to 10 days.

Quality

RID: 1037 **Reference number** 4928

Seyfried LS;

Postpartum mood disorders

2003 15 3 International Review of Psychiatry **pgs** 231 242

Study Type: Reviews and Reports

Patient Characteristics ---

Intervention

Comparisons ---

Study Length

Outcomes ---

Effect

Funding ---

Conclusions Women with postpartum blues should be encouraged to seek further evaluation if symptoms persist beyond 7 to 10 days.

Quality

42 Perineal Pain How should it be identified and managed?
What information or advice would enable women to monitor their own health and well-

Grading: ***1++*** ***High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias***

RID: 925 **Reference number** 2823

Beaver WT;McMillan D;

Methodological considerations in the evaluation of analgesic combinations: Acetaminophen (paracetamol) and hydrocodone in postpartum pain776

1980 10 SUPP L 2 British Journal of Clinical Pharmacology **pgs** 215S 223S

Study Type: Randomised Controlled Trial

Patient Characteristics PP women with either episiotomy or uterine cramp pain within 48 hours of vaginal delivery.

Intervention Comparison of placebo, acetaminophen 1000mg, hydrocodon 10 mg, or acetaminophen plus hydrocodone or codeine 60 mg.

Comparisons Four way comparison

Study Length 6 hours

Outcomes ANOVA

Effect 50% relief was the measure of analgesia compared to placebo. Acetaminophen 1000mg and hydrocodone 10 mg produced comparable analgesia $p<0.01$. The analgesia produced by the combination was almost exactly equal to the sum of the effects of its two constituents.

Funding Knoll Pharm.

Conclusions Possible problem emerges when comparing agents with different mechanisms of analgesic action across general pain models. Evidence from this study contradicts previous studies but seems when studies on effect of narcotics on uterine cramping or episiotomy are investigated it seems that both types of pp pain can respond to oral narcotics.

Quality

RID: 879 **Reference number** 1121

Harrison RF;Brennan M;

Comparison of two formulations of lignocaine spray with mefenamic acid in the relief of post-episiotomy pain: a placebo-controlled study60

1987 10 6 Curr Med Res Opin **pgs** 375 379

Study Type: Randomised Controlled Trial

Patient Characteristics Primiparous Caucasian women with moderate or severe episiotomy pain.

Intervention Lignocaine alcoholic and aqueous and mefenamic acid and placebo treatments for perineal

Comparisons Four way comparison

Study Length 6 hours

Outcomes T-test

Effect Treatment vs placebo $p<0.001$ Lignocaine alcoholic and placebo $p>0.05$ Lignocain aqueous and alcoholic $p<0.05$ Lignocaine aqueous and mefenamic acid $p>0.05$

Funding Delandale Lab Ltd.

Conclusions Results show that lignocaine aqueous spray and mefenamic acid are more effective than lignocaine alcoholic or placebo. The aqueous spray has faster onset but shorter half life than mefenamic acid. There was no significant difference between these two on pain intensity/time curve.

Quality

RID: 870 **Reference number** 912

Harvey MA;
Pelvic floor exercises during and after pregnancy: a systematic review of their role in preventing pelvic floor dysfunction.

2003 25 6 Journal of Obstetrics & Gynaecology Canada: JOGC **pgs** 487 498

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Unknown
Conclusions This review looks at both antenatal and postnatal PFEs and their role in prevention and treatment of urinary and faecal incontinence. The postnatal trials were not combined due to differences in methodology. The data is scant regarding the preventative role of antepartum and postpartum PFEs in continent pp women. PP PFEs when performed with biofeedback or a vaginal cone decreased urinary incontinence in high risk women. Reminder and motivational systems without expert instruction appeared to be ineffective.
Quality ++

RID: 846 **Reference number** 370
Hay-Smith EJC;
Therapeutic ultrasound for postpartum perineal pain and dyspareunia

1998 Cochrane Database of Syestematic Reviews John Wiley & Sons **pgs**

Study Type: Systematic Review
Patient Characteristics RCT and quasi-randomised trials
Intervention Therapeutic ultrasound for perineal pain pp
Comparisons No treatment
Study Length NA
Outcomes ORs
Effect Two placebo controlled trials women were likely to report improvement in pain with OR 0.37 (CI .19-.69). No other outcome reached significance
Funding Cochrane Review
Conclusions There is not enough evidence to evaluate the use of ultrasound in treating perineal pain or dyspareunia
Quality

RID: 850 **Reference number** 415
Hay-Smith EJC;Bo K;Berghmans LCM;Hendriks HJM;de Bie RA;van Waalwijk van Doorn ESC;
Pelvic floor muscle training for urinary incontinence in women

2001 Cochrane database of systematic Reviews **pgs**

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length

Outcomes

Effect

Funding Cochrane

Conclusions Forty three studies were included but most of the trials were small. Pelvic floor muscle training appeared to be an effective treatment for adult women (not specifically pp women) with stress or mixed incontinence. Pelvic floor muscle training was beter than no treatment or placebo. It is unclear whether it is effective for urge incontinence. There is not enough evidence to determine if it is better than other active treatments.

Quality ++

RID: 796 **Reference number** 2871

Hay-Smith J;Herbison P;M°rkved S;

Physical therapies for prevention of urinary and faecal incontinence in adults

2004 Issue 2 Cochrane Database of Systematic Reviews **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions This review is not limited to pp women. Two trials in men (155 men) and 13 trials in women (4661) were included. There were methodolgical problems with many of the trials. Most trials recruited regardless of continence status . Threeof seven trials in childbearing women reported less urinary incontinence after pelvic floor muscle training compared to control at three months pp. Two trials selected women at higher risk of postnatal incontinence. The third used an intensive training program. There was insufficient evidence to determine whether physical therapies can prevent incontinence in childbearing women.

Quality ++

RID: 849 **Reference number** 399

Hedayati H;

Rectal analgesia for pain from perineal trauma following childbirth

2003 1 Cochrane Database of Systematic Reviews John Wiley & Sons **pgs**

Study Type: Systematic Review

Patient Characteristics RCT's

Intervention Rectal NSAID analgesia for perineal trauma

Comparisons Compare with placebo for perineal pain following birth

Study Length 24 hours after birth

Outcomes RR

Effect NS difference for mild or sever pain up to 24 hours but moderate pain was reduced RR 0.13 (CI 0.02-0.76).

Funding Cochrane Review

Conclusions

Quality

RID: 856 **Reference number** 519

Hedayati H;Parsons J;Crowther CA;

Topically applied anaesthetics for treatment of perineal pain after childbirth

2004 1 Cohrane Database of Systematic Reviews John Wiley & Sons **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions Eight trials of 976 women were included in the review. The five trials reviewed showed no difference in pain relief when the topical anaesthetic was compared with placebo. Two trials looked at additional analgesia taken for perineal pain. One trial found that less additional analgesia was required with epifoam but lignocain/lidocaine showed no difference. The authors comcluded that the evidence for the effectiveness of topically applied local anaesthetics for treating perineal pain is not compelling.

Quality ++

RID: 845 **Reference number** 358

Herbison P;

Weighted vaginal cones for urinary incontinence

2002 Cochrane Database of systematic Reviews John Wiley & Sons **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions Fifteen studies with 1126 women, 466 of whom received cones were included. Review was not limited to pp women. All of trials were small and quality was hard to judge. However cones appeared to be better than no active treatment (RR for failure ot cure 0.74, 0.59-0.93).There was no significant difference between cones and pelvic floor exercises and or electrostimulation. Study sizes were small. The authors conclude that cones should offered as one option so tht if women find them unacceptable they know there are other treatments

Quality ++

RID: 852 **Reference number** 443

Jewell DJ;

Interventions for treating constipation in pregnancy

2001 Cochrane Database of Systematic Reviews John Wiley & Sons pgs

Study Type: Systematic Review

Patient Characteristics Pregnant women

Intervention Fibre supplements and stimulant laxatives

Comparisons !. Fibre vs. placebo 2. Fibre vs. stimulant laxative

Study Length 1. 2 weeks 2. Unknown

Outcomes Frequency

Effect 1. OR 0.18 OR 0.30

Funding Cochrane

Conclusions Only two studies in this review. Study looks at treatment in pregnancy. No information found for treatment of postpartum constipation

Quality

RID: 947 **Reference number** 4320

Sudlow C;Warlow C;

Epidural blood patching for preventing and treating post-dural puncture headache

2001 Cochrane Database of Systematic Reviews John Wiley & Sons pgs

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions Three trials (77 patients) were eligible for inclusion. Although the results indicate that both prophylactic and therapeutic epidural blood patching may be of benefit the very small numbers of patients and outcome events precluded reliable assessments of the potential benefits and harms. More study is required.

Quality ++

RID: 927 **Reference number** 2829

van Tulder MW;Jellema P;van Poppel MNM;Nachemson AL;Bouter LM;

Lumbar supports for prevention and treatment of low back pain

2000 1 Cochrane Database of Systematic Reviews John Wiley & Sons Ltd pgs

Study Type: Systematic Review

Patient Characteristics NA

Intervention Limbar support for low back pain

Comparisons NA

Study Length NA

Outcomes Review of 5 RCT and 2 controlled preventative trials and 2 Randomised therapeutic trials.

Effect Only four of thirteen studies scored positive on 50% or more of the internal validity criteria.

Funding Cochrane

Conclusions No evidence found that lumbar supports are effective for secondary prevention. They may be more effect than no treatment but unclear if they are more effective than other interventions.

Quality

RID: 928 **Reference number** 2835

Wallace SA;Roe B;Williams K;Palmer M;

Bladder training for urinary incontinence in adults

2004 Cochrane Database of Systematic Reviews **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions Data from five trials with 467 women were included in this review. This was not exclusive to pp women. No statistically differences were found for primary outcome variables when bladder training was compared to no bladder training. Two trials compared bladder training with drugs. Bladder training did reach statistical significance in both of these studies. The limited evidence suggests that bladder training may be helpful for the treatment of ujrinary incontinence but the conclusion is tentative as the trials were of variable quality and of small size with wide confidence intervals.

Quality ++

Grading: *1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 837 **Reference number** 249

Corkill A;Lavender T;Walkinshaw SA;Alfirevic Z;

Reducing postnatal pain from perineal tears by using lignocaine gel: a double-blind randomized trial249

2001 28 1 Birth **pgs** 22 27

Study Type: Randomised Controlled Trial

Patient Characteristics Normal delivery with 1st or 2nd degree tear

Intervention Placebo or lidocaine gel

Comparisons Level of pain

Study Length 48 hours

Outcomes t-test

Effect Women in lignocaine group experienced significantly less perineal pain at 48 hours after delivery compared with the placebo group (p=0.023).

Funding Unknown

Conclusions 2% gel not effective on day 1 but was effective on day two. Late recruitment on pp day 1 as well as attrition bias may have affected results. However it seems reasonable that the gel would provide some relief when compared to placebo.

Quality

RID: 869 **Reference number** 909

Crowther C;Middleton P;
Anti-D administration after childbirth for preventing Rhesus alloimmunisation
1997 Issue 2 John Wiley & Sons **pgs**

Study Type: Metaananalysis
Patient Characteristic RhD negative women without anti-D antibodies giving birth to RhD positive infants Including UK, Canada, USA populations
Intervention Postpartum anti-D prophylaxis
Comparisons No treatment or placebo
Study Length 4-6 mths
Outcomes Development of RhD alloimmunisation
Effect Anti-D administered within 72 hours after birth reduced the incidence of RhD alloimmunisation 6 months postpartum (RR 0.04 [95% CI 0.02-0.12]) and in a subsequent pregnancy (RR 0.14 [95% CI 0.06-0.35])
Funding
Conclusions Also assessed optimal dose and ABO compatibility. Authors state that 3 trials had unclear methods of randomisation, whilst the other 3 trials had inadequate methods of randomisation. Excluding the latter 3 trials did not affect the final results. Authors concluded that this study supported the current policy of administering anti-D prophylaxis <72 hrs (regardless of antibody status) to all RhD negative women after birth of a RhD positive baby or one whose Rh status is unknown.
Quality
Meta analysis of 6 randomised and quasi-randomised clinical trials

RID: 936 **Reference number** 2880
Dale A;Cornwell S;
The role of lavender oil in relieving perineal discomfort following childbirth: a blind randomized clinical trial
1994 19 1 J ADV NURS **pgs** 89 96

Study Type: Randomised Controlled Trial
Patient Characteristics pp womenat Hinchingbrook Park hospital
Intervention use of pure lavendar oil, synthetic oil and placebo in bath to relieve perineal discomfort
Comparisons Level of perineal pain after use of bath additive
Study Length 10 days
Outcomes Chi square
Effect There were no statistically significant differences between groups in levels of perineal
Funding East Anglian Regional Health Authority
Conclusions The study provides no evidence to support the practice of using lavendar oil for perineal pain. However comments from women show that most women found use of the oil a pleasant experience.
Quality + High non completion rate.

RID: 878 **Reference number** 1120
Harrison RF;Brennan M;
A comparison of alcoholic and aqueous formulations of local anaesthetic as a spray for the relief of post-episiotomy pain61
1987 10 6 Curr Med Res Opin **pgs** 370 374

Study Type: Randomised Controlled Trial
Patient Primiparous Caucasian women with moderate or severe episiotomy pain.

Characteristics

Intervention Lignocaine alcoholic, aqueous and cinchocaine aqueous spray.

Comparisons Three way comparison

Study Length 6 hours

Outcomes T-test, mean values

Effect Levels of significance not presented. Mean values for aqueous lignocaine slightly lower than other sprays at each time interval.

Funding

Conclusions Levels of significance not presented but there was not a great deal of difference between treatments in terms of reducing pain intensity after episiotomy. The best preparation by a narrow margin appeared to be the aqueous formulation of lignocaine.

Quality

RID: 934 **Reference number** 2865

Harrison RF;Brennan M;Reed JV;Wickham EA;

A review of post-episiotomy pain and its treatment

1987 10 6 Curr Med Res Opin **pgs** 359 363

Study Type: Randomised Controlled Trial

Patient Characteristics Primiparous Caucasian women with moderate or severe episiotomy pain.

Intervention Lignocaine, cinchocaine or placebo for episiotomy pain

Comparisons Three way comparison

Study Length 6 hours

Outcomes T-test

Effect Lignocaine vs water, $t=2.75$, $p<0.01$

Funding Unkown

Conclusions Results show that lignocaine spray was more effective than cinchocaine and that placebo was least effective. Results seem plausible and comparison of two medications was blinded so likely to be accurate.

Quality

RID: 921 **Reference number** 2801

Hill PD;

Effects of heat and cold on the perineum after episiotomy/laceration

1989 18 2 Journal of Obstetric Gynecologic & Neonatal Nursing **pgs** 124 129

Study Type: Randomised Controlled Trial

Patient Characteristic Mothers who had an episiotomy and/or laceration, experienced some degree of perineal discomfort and were able to cooperate with instructions given.

Intervention Treatment with warm pack, cold pack or warm sitz bath.

Comparisons Three way comparison regarding REEDA score(redness, ecchymosis, edema, discharge and approximation of skin edges.

Study Length 24 hours

Outcomes REEDA score 0-15; chi square and ANOVA

Effect NS effect before and after treaement of any intervention

Funding American Parmaseal Co., Baxter Healthcare Corp.

Conclusions The study was small and the interventions were only applied for 20 minute intervals, perhaps not long enough for treatment to take effect. The assessment tool had good interrater reliability (0.93) but the reliability and validity were not reported.

Quality

RID: 844 **Reference number** 351

Hopkinson JHI;

Ibuprofen versus propoxyphene hydrochloride and placebo in the relief of postepisiotomy pain

1980 27 1 Current Therapeutic Research **pgs** 55 63

Study Type: Randomised Controlled Trial

Patient Characteristics PP women experiencing moderate to sever pain due to episiotomy

Intervention Treatment with any one of four regimes for pp pain

Comparisons Motrin 400 mg,; motrin 800 mg; propoxyphene 65 mg and placebo.

Study Length 4 hours

Outcomes Pain intensity scale compared by t test

Effect Overall, ibuprofen 400 mg and 800 mg were both superior to propoxyphene ($p<0.05$). All medications were superor to placebo ($p<0.001$ for ibuprofen and $p<.025$ for propoxyphene)

Funding Unknown

Conclusions Antiinflammatories appear to be most effect for episiotomy pain relief

Quality + Pain rating is subjective and prone to bias

RID: 938 **Reference number** 2882

Hutchins CJ;Ferreira CJ;Norman-Taylor JQ;

A comparison of local agents in the relief of discomfort after episiotomy

1985 6 1 Journal of Obstetrics & Gynaecology **pgs** 45 46

Study Type: Randomised Controlled Trial

Patient Characteristics PP episiotomy patients

Intervention 1% lidocaine gel, epifoam and placebo

Comparisons Pain relief

Study Length 4 days

Outcomes Mann Whitney U testing

Effect NS difference between the two medications but both medications were significantly different from placebo, $p=0.01$

Funding Unknown

Conclusions Study not well written. There is very little detail. The pain scale is not described. Pain is a subjective evaluation. Power not discussed. However, it is likely that the results are valid and that medication is more effective than placebo. There are no differences between the two medical treatments.

Quality

RID: 838 **Reference number** 298

Minassian.V.A;Jazayeri A;

Randomized trial of lidocaine ointment versus placebo for the treatment of postpartum perineal pain

2002 100 6 Obstetrics & Gynecology **pgs** 1239 1243

Study Type: Randomised Controlled Trial

Patient Characteristic Minassian VA, Jazayeri A, Prien SD, Timmons RL, & Stumbo, K. Randomized Trial of Lidocaine Ointment Versus Placebo for the Treatment of Postpartum Perinal Pain. American

s College of Obstetricians and Gynecologists. 2002.

Intervention 5% lidocaine ointment vs. placebo

Comparisons Amount of ointment used by weight of the jar before and after use and the total number of pain medication pills taken. Also a pain questionnaire with visual and linear analogue scales used.

Study Length PP hospitali-sation

Outcomes Amount of ointment used by weight of the jar before and after use and the total number of pain medication pills taken. Also a pain questionnaire with visual and linear analogue scales used.

Effect T test; chi square; and for non continous data the Mann-Whitney NS difference

Funding Unknown

Conclusions Patients with lidocaine may have realized that they were using medication because of the effect on their fingers. No standardization of the amount of medication used. Power calculations not give however, this is a 1+ study and likely to reflect accurately that 5% topical lidocaine ointment is not helpful.

Quality

RID: 841 **Reference number** 339

Moore W;James DK;

A random trial of three topical analgesic agents in the treatment of episiotomy pain following instrumental vaginal delivery

1989 10 1 Journal of Obstetrics & Gynaecology **pgs** 35 39

Study Type: Randomised Controlled Trial

Patient Characteristics Women undergoing forceps delivery Women undergoing forceps delivery

Intervention Comparison of epifoam, hamamelis water (witch hazel) and ice for perineal pain

Comparisons Three way comparison

Study Length 5 days; 120 patients at 6 weeks pp

Outcomes Chi square

Effect NS difference. All three preparations are equally effective in achieving analgesia. Approximately one-third of all mothers derived only mild or no relief from pain on day 1.

Funding Stafford-Miller

Conclusions Although concealment and blinding were not possible for patients, most but not all of midwives were blinded. Using different observers facilitated more objective evaluation It is likely that the results are accurate and that all three preparations were equally effective at achieving analgesia. One third of mothers received no relief on day 1. Cost of epifoam was not justified. It is likely that the results are accurate and that all three preparations were equally effective at achieving analgesia. One third of mothers received no relief on day 1. Cost of

Quality

RID: 831 **Reference number** 65

Ramler D;Roberts J;

A comparison of cold and warm sitz baths for relief of postpartum perineal pain65

1986 15 6 Journal of Obstetric Gynecologic & Neonatal Nursing **pgs** 471 474

Study Type: Randomised Controlled Trial

Patient Characteristics PP day two with episiotomy

Intervention Hot or cold sitz baths

Comparisons Two way comparison between types of bath

Study Length 1 hour after each bath

Outcomes ANOVA

Effect P=0.05 for pain relief of cold water immediately after bathing. NS difference at 30 minutes or 1 hour.

Funding Unknown

Conclusions Pain scales are subjective; bias must be considered No power calculations. However, results appear to reflect real difference in pain relief

Quality

RID: 962 **Reference number** 253

Steen M;Cooper K;Marchant P;Griffiths-Jones M;Walker J;

A randomised controlled trial to compare the effectiveness of icepacks and Epifoam with cooling maternity gel pads at alleviating postnatal perineal trauma

2000 16 1 Midwifery **pgs** 48 55

Study Type: Randomised Controlled Trial

Patient Characteristics PP women with NSVD and episiotomy or seconddgree tear.

Intervention Topical pain relief with either cool gel pads, ice pack or placebo

Comparisons Pain relief between three treatment groups

Study Length 14 days and 6 weeks

Outcomes Chi square

Effect Statistically significant differences in the median of reported pain between the three groups at day five only($p<0.023$). There was a significant difference in those reporting moder/severe pain at initial assessment, day 2, 3, and 5.Both treatments were more effective than no treatment for oedema. There were no statisticaly significant differences between the three groups when assessing healing of the wound.

Funding Unknown

Conclusions This study presents weak evidence for the use of gel pads versus ice for topical perineal treatment. Further studies should be done before gel pads are recommended universally.

Quality + Self selected subjective response rate

RID: 888 **Reference number** 1477

Vernon H;McDermaid CS;Hagino C;

Systematic review of randomized clinical trials of complementary/alternative therapies in the treatment of tension-type and cervicogenic headache

1999 7 3 Complementary Therapies in Medicine **pgs** 142 155

Study Type: Systematic Review

Patient Characteristics Treatment for non migrainous headache

Intervention Acupuncture, spinal manipulation, electrotherapy, physiotherapy, homeopathy and other

Comparisons Quality scores for RCTs ranged from 30-80 on 100 point scale

Study Length See comments

Outcomes Ontario Chiropractic Asociation and National Chiropractic Mutual Insurance Company

Effect One therapy, electrotherapy to cranial muscles would appear to have sufficient strength of evidence to support its use in treating tension headache. One high quality trial recommends against use of homeopathy in tension headache. Evidence for other therapies is too sparse to make recommendations.

Funding

Conclusions Study done by chiropractors – professional bias may have influenced this work or the interpretation of studiesAlso small number of trial. Heterogeneity prevented pooling of data.

Quality

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 887 **Reference number** 1461

Bronfort G;Assendelft WJ;Evans R;Haas M;Bouter L;

Efficacy of spinal manipulation for chronic headache: a systematic review

2001 24 7 Journal of Manipulative and Physiological Therapeutics **pgs** 457 466

Study Type: Systematic Review

Patient Characteristics Chronic headache patients

Intervention Spinal manipulation as treatments

Comparisons Other forms of treatment such as medication and massage.

Study Length NA

Outcomes Unable to pool due to heterogeneity of studies

Effect "Moderate" evidence that spinal manipulation has short-term efficacy similar to amitriptyline in prophylactic treatment of chronic tension hA and migraine. SMT may have better effect than massage for cervicogenic headache.

Funding

Conclusions Study done by chiropractors – professional bias may have influenced this work or the interpretation of studies Also small number of trials.

Quality

RID: 1551 **Reference number** 89

Chiarelli P;Cockburn J;

Promoting urinary continence in women after delivery: randomised controlled trial

2002 324 7348 **pgs** 1241

Study Type: Randomised Controlled Trial

Patient Characteristic Women who delivered babies between August 1998 and Feb. 2000 and had forceps or ventouse deliveries or babies had birth wt of 4000 gm or more

Intervention Women received one visit by physiotherapist in hospital and one visit at home 8 weeks after delivery for instruction in pelvic floor exercises.

Comparisons Urinary incontinence at three mos. between intervention and usual care group

Study Length 3 mos.

Outcomes % prevalence of incontinence and % difference between groups as well as OR after controlling for confounding

Effect OR 0.65 (95% CI 0.46-0.91) for incontinence for women in the intervention group. At 3 mos. Women who had mixed symptoms of stress and urge incontinence had fewer severe symptoms if they received the intervention – 6.7% difference , p=0.01

Funding Medical Benefits Fund, Physiotherapy Foundation and University of Newcastle Research Management Committee

Conclusions Identifying and intervening for mild incontinence may have little effect on outcomes. Women at risk are those with instrumental vaginal deliveries and those with macrosomic babies.

Quality

RID: 884 **Reference number** 1333

Sleep J;Grant A;
Effects of salt and Savlon bath concentrate post-partum

1988 84 21 Nursing Times **pgs** 55 57

Study Type: Randomised Controlled Trial

Patient Characteristics All women with vaginal deliveries at Royal Berkshire Hospital in 1985

Intervention Use of savlon bath concentrate, salt or nothing postpartum

Comparisons Three way comparison of effect on pain and healing.

Study Length 10 days

Outcomes Frequency percents

Effect No significant effect

Funding Unknown

Conclusions Concealment and blinding not possible. Maternal questionnaires are subjective and midwifery inspection not validated. No mention of intention to treat analysis. Not a strong study methodologically except for randomisation of treatments and two methods of assessment (maternal report and midwifery evaluation). There was also good compliance with treatment. It is likely that there is no significant difference in treatments.

Quality

RID: 939 **Reference number** 2885

Steen M;
A randomised controlled trial to evaluate the effectiveness of localised cooling treatments in alleviating perineal trauma: the APT study

2002 12 3 MIDIRS Midwifery Digest **pgs** 373 376

Study Type: Randomised Controlled Trial

Patient Characteristics PP women with singleton delivery, English speaking and an epis or 2nd degree tear.

Intervention Gel packs, ice or no treatment.

Comparisons Three way comparison

Study Length Day 14

Outcomes ANOVA

Effect Statistically significant difference in pain between three groups at initial assessment, day 2, 3, 5 p=.017-.038. There was significant difference in oedema on day 2 and 5 p=.016-.018 between groups. Ice and gel packs appear to reduce inflammatory response compared to no treatment. Differences between ice and gel packs not reported.

Funding Unknown

Conclusions Pain scales are subjective; blinding of assessors was not discussed. There is no information about how often women used the cooling treatment and what oral medication was being used. It appears that the gel pads are well accepted and provide statistically significant relief for moderate or severe pain and less edema. There was no difference in healing. Reporting of missing parameters noted above required before recommendation can be made.

Quality

RID: 883 **Reference number** 1330

Steen M;Cooper K;
Cold therapy and perineal wounds: too cool or not too cool?

1998 6 9 BR J MIDWIFERY **pgs** 572 579

Study Type: Systematic Review

Patient NA

Characteristics

Intervention Cryoanalgesia

Comparisons Studies of cold therapy across many areas of medicine

Study Length NA

Outcomes No summary statistics

Effect NA

Funding Unknown

Conclusions Concludes that there is no evidence that cold therapy delays healing. But in fact, healing does not seem to be compared in any of these studies with other modalities of treatment.

Quality

RID: 1554 **Reference number** 292

Troy NW;Dalgas P;

The effectiveness of a self-care intervention for the management of postpartum fatigue

2003 16 1 APPL NURS RES **pgs** 38 45

Study Type: Randomised Controlled Trial

Patient Characteristic Healthy primips pp over 18 who could read and write English at eighth grade level and who had an NSVD of healthy, full-term single infant.

Intervention Measurement of fatigue for both groups and TMG self-care guide for intervention group

Comparisons Fatigue scores in mothers with and without TMG intervention

Study Length 6 weeks

Outcomes T test

Effect Differences between pm fatigue levels of experimental and control groups did not vary significantly. At 6 weeks pp the mean pm fatigue scores were similar to those of healthy men and women reported in another study but there was a statistically significant decline in am fatigue through the fourth week between groups (p=0.033.

Funding Maternal child Health Bureau

Conclusions Internal bias: No concealment or blinding as these were not possible External validity: sample limited to primips who attended childbirth classes; had uncomplicated pregnancies; NSVD; could read and write English and were primarily white,married and well educated. Summary is that pp fatigue is prevalent and may not resolve by 6 weeks postpartum. The study has poor internal and external validity and should be repeated with larger sample.

Quality

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 1523 **Reference number** 969

Black NA;Parsons A;Kurtz JB;McWhinney N;Lacey A;Mayon-White RT;

Post-partum rubella immunisation: a controlled trial of two vaccines1

1983 2 8357 **pgs** 990 992

Study Type: Intervention Study -Non randomised

Patient Characteristic Postpartum women identified as rubella-seronegative following antenatal screening John Radcliffe Maternity Hospital, Oxford 1981-2

Intervention Rubella vaccination prior to discharge from hospital

Comparisons Cendehill vaccine vs. RA 27/3 vaccine

Study Length Upto 13 weeks

Outcomes Protection against Rubella (postvaccinal rubella antibody titres >1/10 and a >15 IU zone of haemolysis)

Effect 97.6% (120/123) of women receiving RA 27/3 demonstrated a good serological response compared with 82.2% (97/118) who received Cendehill vaccine (($\chi 2$=15.1; df=1, p<0.01).

Funding Not stated

Conclusions Prospective study. 50 women also received anti-D Ig in addition to RA 27/3-in these women, the serological response to RA 27/3 (96.3%) was similar to women receiving RA 27/3 alone (97.6%). Most common side-effects associated with RA 27/3 vaccine were mild reddish rash (13/52), painful joints (13/52), headache (19/52) and sore throat (16/52). In 15 women with a subsequent pregnancy (9-27 months later), postvaccinal titres had dropped in 6 (40%) and stayed the same in 7 (47%) of those who received RA 27/3.

Quality

RID: 790 **Reference number** 2570

Damon H;Henry L;Bretones S;Mellier G;Minaire Y;Mion F;

Postdelivery anal function in primiparous females: ultrasound and manometric study

2000 43: (4) Diseases of the Colon & Rectum **pgs** 472 477

Study Type: Cohort

Patient Characteristics These are primiparous women s/p vaginal delivery who had both ultrasound and mamometry.

Intervention Anal sphincter defects and symptoms of incontinence

Comparisons Defects compared to symptoms

Study Length 12 weeks after delivery

Outcomes Mean standard deviation and chi squared test

Effect 14 women with clinical signs of anal incontinence had lower resting and squeeze anal pressures (p<0.05). Resting and squeeze anal pressureswere significantly decreased in patients with incontinence and an anal defect and after forceps deliveries (p value not given). Anal sphincter defects are frequent after first vaginal delivery (33.5%) but may be asymptomatic. In the final sample of 52 women 38 were asymptomatic but 28 of these had a defect.

Funding Unknown

Conclusions Demonstrates that anal defects after vaginal delivery are common but not necessarily

Quality + Although no an RCT the study is likely to be accurate as the physiological evaluation was done by ultrasound and manometry

RID: 943 **Reference number** 4135

Ghosh C;Mercier F;Couaillet M;Benhamou D;

Quality-assurance program for the improvement of morbidity during the first three postpartum days following episiotomy and perineal trauma

2004 6 Acute Pain **pgs** 1 7

Study Type: Cohort

Patient Characteristics Postpartum women with and without sutured perineal trauma.

Intervention Perineal pain levels before and after institution of oral pain management protocol

Comparisons Pain levels before analgesic protocol was introduced and levels in women who recei ed ketoprofen 50 mg and paracetamol 1 g qds or if there were contraindications to NSAIDS a combination of dextropropoxyphene 60 mg and paracetamol 800 mg qds

Study Length Three days

Outcomes P values are presented based on t test

Effect For both current and worst pain there was a statistically significant reduction in pain scores between Phase 1 and later audits for each postpartum day, $p<0.05$

Funding Unknown

Conclusions This study highlights the advantages of oral medication for perineal pain.

Quality + This before and after study utilised a subjective pain scale which is subject to bias. However, the same scale was used for all groups and compared after treatment was initiated so results are likely to be comparable.

RID: 867 **Reference number** 869

Macarthur AJ;MacArthur C;Weeks SK;

Is epidural anesthesia in labor associated with chronic low back pain? A prospective cohort study.[see comment]

1997 85 5 Anesthesia & Analgesia **pgs** 1066 1070

Study Type: Cohort

Patient Characteristics PP women except those with history of back pain and those undergoing elective c-section.

Intervention Back pain after epidural

Comparisons Two way comparison

Study Length 1 year

Outcomes Chi square

Effect NS difference between the two groups in original study except on day 1 pp.

Funding Unknown

Conclusions Study is underpowered – 77% power to detect a two fold difference in back pain. 30% and 60% to detect relative risk of 1.5 and 1.8 respectively. Contradicts other retrospective studies of epidural and back pain.

Quality

RID: 797 **Reference number** 2894

MacArthur C;Bick DE;Keighley MB;

Faecal incontinence after childbirth

1997 104: (1) British Journal of Obstetrics and Gynaecology **pgs** 46 50

Study Type: Cohort

Patient Characteristics All pp women who delivered between April and September 1992

Intervention Common health problems after delivery

Comparisons New and recurrent faecal incontinence and features of symptoms

Study Length 10 months after delivery (mean)

Outcomes Frequency percents

Effect 4% of women reported faecal incontinence as a new pp symptom.

Funding Department of Health, London

Conclusions Incidence of new faecal incontinence documented

Quality + Questionnaires and follow up interviews confirmed results

RID: 946 **Reference number** 4303

Morkved S;Bo K;

Effect of postpartum pelvic floor muscle training in prevention and treatment of urinary incontinence: a one-year

follow up

2000 107 8 British Journal of Obstetrics & Gynaecology **pgs** 1022 1028

Study Type: Cohort

Patient Characteristics PP women matched on age, parity and type of delivery

Intervention Urinary incontinence in women who had 8 week pelvic floor muscle training and controls

Comparisons Urinary incontinence and pelvic floor muscle strength one year after delivery

Study Length 1 year

Outcomes Chi square

Effect At one year significantly more control women reported stress urinary incontinence and/or showed urinary leakage at the pad test ($p<0.01$). A significantly greater $p<0.01$ muscle strength increase in the period between 16th week and one year postpartum was demonstrated in the former trining roup.

Funding Norwegian Fund for Postgraduate Training in Physiotherapy and Norwegian Board of Health

Conclusions This eight week pp pelvic floor muscle training course was effective in prevention and treatment of stress urinary incontinence.

Quality + physiological evaluation done and likely to be accurate. Level of exercise was self reported and subject to bias

RID: 868 **Reference number** 888

Russell R;Groves P;Taub N;O'Dowd J;Reynolds F;
Assessing long term backache after childbirth.[see comment: BMJ. 1993 Jul 3;307(6895):64]888

1993 306 6888 Brit Med J **pgs** 1299 1303

Study Type: Cohort

Patient Characteristics PP primips March 1990-Feb. 1991 delivering at St. Thomas.

Intervention PP primips March 1990-Feb. 1991 delivering at St. Thomas. Relationship of epidural to back pain and other factors associated with long term back ache including type of back pain.

Comparisons Two way comparison

Study Length 1 year

Outcomes Chi square

Effect Retrospective survey which showed a significant difference in back ache between the epidural and non epidural groups $p<0.01$ The few women who attended clinic confirmed that most backache was postural and not severe. There were no differences in this respect between women who had received epidurals and those who did not.

Funding Sir Jules Thorn Charitable Trust

Conclusions Studies are contradictory regarding the effect of epidurals and back pain. Difficult to make an association between epidural and back pain. Retrospective studies tend to be positive and prospective studies are more negative.

Quality

RID: 835 **Reference number** 164

Stein G;Morton J;Marsh A;Collins W;Branch C;Desaga U;Ebeling J;
Headaches after childbirth164

1984 69 2 Acta Neurologica Scandinavica **pgs** 74 79

Study Type: Cohort

Patient Characteristics PP women with and without PNH

Intervention Clinical features of headaches and their relationship to migraine, mood, weight and electrolyte

and hormonal changes

Comparisons Differences between two groups on each parameter above.

Study Length 7 days

Outcomes Frequency percents and chi square

Effect Association with migraine p=<0.01; depression p=<0.001 (no discussion of depression instrument);NS difference in weight loss between groups however, there was a trend of weight loss on day prior to and day following headache. Hormonal differences may reflect renal clearance rather than hormone levels. Other metabolic changes were NS.

Funding Unknown

Conclusions This is a very small study and there is no discussion of the depression scale used. Metabolic changes may represent altered renal clearance rather than differences in plasma hormone levels. Study using plasma levels rather than urine samples should be done. Only association is with PNH and migraine history. This is a small subset of the PNH group.

Quality

RID: 801 **Reference number** 4870

Sultan AH;Kamm MA;Hudson CN;Thomas JM;Bartram C;

Anal-sphincter disruption during vaginal delivery

1993 329: (26) N Engl J Med **pgs** 1905 1911

Study Type: Cohort

Patient Characteristics An unselected consecutive sample of women who had been pregnant for more than 34 weeks

Intervention anal sphincter and pudendal nerve damage postpartum

Comparisons Endosonography, anal mamometry, measurement of terminal motor latency of the pudendal nerves

Study Length 49 days pp (median)

Outcomes T test, chi square

Effect Of 127 women who deliveredvaginally, 13 (10%) had one or both bowel symptoms (urgency and incontinence) after delivery. Six weeks after delivery 28 primiparous women (35%) had new sphincter defects. Ninteen multiparous women had a sphincter defect before delivery and 21 (44%) after delivery. Terminal motor latencyofeach pudendal nerve was significantly increased in all 99 women who delivered vaginally and were tested.

Funding Unknown

Conclusions Although there is a definite relation between the presence of sphincter defects, anal pressure and bowel symptoms (p<0.001) only one third of women with sphincter defects had bowel

Quality + It is likely that the physiological testing done is accurate

Grading: *2- Case–control or cohort studies with a high risk of confounding bias, or chance and a significant*

RID: 904 **Reference number** 2685

Lee SJ;Park JW;

Follow-up evaluation of the effect of vaginal delivery on the pelvic floor

2000 43 11 Diseases of the Colon & Rectum **pgs** 1550 1555

Study Type: Cohort

Patient Women who deliveredvaginally with posterolateral episiotomy without forceps. Among the

Characteristic multips none had previous symptoms of incontinence

Intervention Evaluate the effect of vaginal delivery on plevic floor by serial measurement of pudendal nerve terminal motor latency, perineal descent and anal pressure before and after delivery.

Comparisons Before and after measurements ofpudendal nerve terminal motor latency, perineal descent and anal pressure.

Study Length 6 months

Outcomes Changes in pudendal nerve latency and anal pressure and measures of perineal descent

Effect In all women two to three days after delivery pudendal nerve terminal motor latency was prolonged perineal plane at straining became lower and squeeze pressure decreased. Two months afterdelivery pudendal nerve latency recovered to level before delivery; perineal descent remained increased after six months had passed ($p<0.05$); anal squeeze pressures still remained significantly lower at six months ($p<0.05$)

Funding Unknown

Conclusions Although this study aims to evaluate the effect of vaginal delivery on the pelvic floor every woman in this study had an episiotomy and therefore the study is confounded and is more likely a study of the effect of episiotomy on the pelvic floor.

Quality + Study not randomised but followed women prospectively; confounded by episiotomy

RID: 881 **Reference number** 1256

Scharff L;Marcus DA;Turk DC;

Headache during pregnancy and in the postpartum: a prospective study71

1997 37 4 Headache **pgs** 203 210

Study Type: Cohort

Patient Characteristics PP women with history of antepartum headache

Intervention Intensity and frequency of headache 12 months after being taught therapeutic, non pharmacological treatments.

Comparisons Comparison of headache frequency and intensity over time.

Study Length 12 months

Outcomes Change score of mean headache index

Effect 63.6% improvement at one year followup with 80% of sample responding

Funding Raymond and Elizabeth Bloch Educational and Charitable Foundation and the National Headache Foundation

Conclusions Identifies some potential treatment modalities but does little to clearly demonstrate an effect of treatment over time.Numerous other factors including hormonal changes, changes in stress levels, changes in general health could have influenced headache improvement. No information if women in sample continued headache therapy for entire year of follow up.

Quality

Grading: *3 Non-analytic studies (for example, case reports, case series)*

RID: 866 **Reference number** 856

Barrett G;Pendry E;Peacock J;Victor C;Thakar R;Manyonda I;

Women's sexuality after childbirth: a pilot study

1999 28 2 Archives of Sexual Behavior **pgs** 179 191

Study Type: Cohort

Patient Characteristics 158 consecutive primips chosen with 62% response rate. Responders and nonresponders were significantly different with respect to ethnicity and employment status . Responders more likely to be white and employed. May affect external validity.

Intervention Survey questionnaire

Comparisons NA

Study Length 7 months

Outcomes Differences between proportions were tested using chi square; for paired proportions McNemar's test was used and for three-related proportions Cochran's Q test was used.

Effect 53% of women experienced dyspareunia in first three months – p<0.0001

Funding Unknown

Conclusions Under a third of women had resumed sex by 6 week so 6 week check is too early to discover chronic problems. Childbirth brings about a change in sexual relations. 58% experienced dyspareunia in first 3 months

Quality

RID: 1556 **Reference number** 2707

Dolman M;

Midwives' recording of urinary output

1992 6 27 **pgs** 25 27

Study Type: Other Observational

Patient Characteristics Women with vaginal deliveries and epidural anaesth

Intervention Chart review for urinary output

Comparisons Not comparative – descriptive only

Study Length PP hospital-lisation

Outcomes Frequency

Effect 65% had to be catheterised before having first spontaneous void. 100% voided spontaneously after 12 hours. 80% had no documentation of amounts. 65% had to be catheterised before having first spontaneous void. 100% voided

Funding Unknown

Conclusions Small survey study recommends accurate documentation of urinary output as essential in recognising potential hypotonic detrusor activity. No long term follow up done to evaluate ongoing problems after discharge.

Quality

RID: 1526 **Reference number** 2707

Dolman M;

Midwives' recording of urinary output

1992 6 27 **pgs** 25 27

Study Type: Other Observational

Patient Characteristics Women with vaginal deliveries and epidural anaesthesia

Intervention Chart review for urinary output

Comparisons Not comparative – descriptive only

Study Length PP hospitalisation

Outcomes Frequency

Effect 65% had to be catheterised before having first spontaneous void. 100% voided spontaneously after 12 hours. 80% had no documentation of amounts.

Funding Unknown

Conclusions Small survey study recommends accurate documentation of urinary output as essential in recognising potential hypotonic detrusor activity. No long term follow up done to evaluated ongoing problems after discharge.

Quality

RID: 949 **Reference number** 4381

Dymond J;

Routine post-natal perineal inspection by midwives

1999 8 2 Journal of Clinical Nursing **pgs** 225 226

Study Type: Qualitative

Patient Characteristics Midwives in maternity unit of district general hospital in south-west England

Intervention Survey to investigate current practices regarding perineal examination

Comparisons NA

Study Length NA

Outcomes Frequency percents

Effect 24% examined every perineum;65% examined sutured perineums; & 70% examined women who complained of discomfort

Funding Unknown

Conclusions Researcher suggest that it may not be necessary to examine every perineum.

Quality

RID: 875 **Reference number** 1052

Glazener CM;

Sexual function after childbirth: women's experiences, persistent morbidity and lack of professional recognition3

1997 104 3 British Journal of Obstetrics & Gynaecology **pgs** 330 335

Study Type: Cohort

Patient Characteristics 20% random sample of all women delivered in Grampian between June 1990-May 1991. 90% response rate after discharge, 90% of traceable women at 8 weeks and 86% of women contacted at 12 mos.

Intervention Survey questionnaire

Comparisons NA

Study Length 12 months

Outcomes Frequency percents and chi square

Effect 71% achieved intercourse by 8 weeks. 28.1% of those had pain. Women who attempted first intercourse from 2-18 mos had 19.7% rate of dyspareunia

Funding Wellcome Trust

Conclusions The study sample is not well described and external validity or generalisability may be an issue

Quality

RID: 937 **Reference number** 2881

Greenshields W;Hulme H;Oliver S;

The Perineum in Childbirth: A survey of women's experiences and midwives practices.

1993 National Childbirth Trust **pgs**

Study Type: Cohort

Patient Characteristics Women who gave birth in 1990

Intervention To assess the incidence of different types of perineal trauma; to determin which factors might influence the type of trauma women experience; to discover what measures are taken to promote healing and relieve pain; to explore the long term effects.

Comparisons This survey was not a comparative study

Study Length up to one year

Outcomes Frequency percents and odds ratios

Effect 80% of mothers had unassisted vaginal deliveries and 29% of these had an intact perineum. The tear rate was 46% and episiotomy rate was 25%.

Funding NCT

Conclusions This survey contains much qualitative information about the experience of perineal trauma and repair techniques. It was the basis of further research in this area.

Quality - This is a self selected sample of NCT members and is therefore unlikely to be a representative group. It is interesting however to review the comments of 2000 women regarding their experiences.

RID: 933 **Reference number** 2861

Jurema MW;Polaneczky M;Ledger WJ;

Hepatitis B immunization in postpartum women2

2001 185 2 American Journal of Obstetrics & Gynecology **pgs** 355 358

Study Type: Other Observational

Patient Characteristics Postpartum women (1994-1999) Age: 18-44 years 143 subjects were white. 113/136 susceptible to Hep B infection following screening for HepBsAg and HepBsAb agreed to participate in study. US, faculty-based Obstetrics and Gynaecology practice.

Intervention Hep B immunisation (3 intramuscular injections) at the first postpartum visit (1st injection)

Comparisons -

Study Length Average of 54.9 weeks

Outcomes Protection against Hep B (postvaccinal Hep BsAb titres> 10mU/ml)

Effect 95.7% (66/69) and 75% (9/12) women who received 3 and 2 injections, respectively were protected against Hep B

Funding Not stated

Conclusions Postpartum vaccination schedule was designed to mirror routine postnatal visits in US-two visits in first 8 weeks and one visit 6 months later Average time interval between delivery and 1st injection was 3.4 weeks. This was followed by the 2nd and 3rd injections 4 weeks and 6 months after the 1st injection. Vaccine efficacy was evaluated as the % of women who accepted the vaccine (no. of women who received at least 2 injections)

Quality

RID: 920 **Reference number** 2769

Salmon D;

A feminist analysis of women's experiences of perineal trauma in the immediate post-delivery period

1999 15 4 Midwifery **pgs** 247 256

Study Type: Other Observational

Patient Characteristics PP women delivered within 5 years with perineal trauma

Intervention Unstructured interviews. Exploration of subjective experiences of difficulties in the immediate post-birth period and examine how this had been informed by cultural, social and medical

Comparisons NA
Study Length NA
Outcomes Barnard's framework used and all data transcribed and themes identified
Effect 3 categories: experiences of interpersonal relationships during suturing; experiences of social support and interpersonal relationshipswhilst healing; feelings associated with coming to terms with perineal trauma.
Funding Unknown
Conclusions Findings support the importance of communication with health care providers – the "ask" in our model
Quality
Open ended inter-views

Grading: *4 Expert opinion, formal consensus*

RID: 1522 **Reference number** 967
Immunisation Against Infectious Disease. 'The Green Book'
1996 **pgs**
Study Type: Reviews and Reports
Patient Characteristics General population
Intervention Immunisation against infectious disease
Comparisons -
Study Length -
Outcomes Protection against infectious disease
Effect No recommendation for postpartum Hep B vaccination, but recommends that immunisation should not be withheld from pregnant women who are in the high risk category.
Funding Not stated.
Conclusions
Quality

RID: 1539 **Reference number** 4906
Centers for Disease Control and Prevention.;
Hepatitis B Virus: a Comprehensive Strategy for Eliminating Transmission in the United States through Universal Childhood Vaccination: Recommendations of the Immunization Practices Advisory Committee
1991 40 RR-13 **pgs** 1 20
Study Type: Reviews and Reports
Patient Characteristics General population
Intervention Hep B immunisation
Comparisons -
Study Length -
Outcomes Protection against Hep B infection
Effect No specific recommendation for postpartum vaccination, but does state that lactation should not be considered a contraindication to vaccination of women
Funding Not stated
Conclusions This recommendation is cited in recent general recommendations on immunisation by the

Centers for Disease Control and Prevention (2002)

Quality

RID: 969 **Reference number** 4905

Royal College of Obstetricians and Gynaecologists.;
Use of Anti-D Immunoglobin for RH Prophylaxis

2002 Royal College of Obstetricians and Gynaecologists **pgs**

Study Type: Guideline

Patient Characteristics RhD negative pregnant and postpartum women sensitised and non-sensitised to anti-D

Intervention Antenatal and postpartum anti-D prophylaxis

Comparisons -

Study Length -

Outcomes Recommendations on the use of anti-D Ig for Rh prophylaxis

Effect For postnatal prophylaxis, administer at least 500iu of anti-D Ig to every non-sensitised RhD negative woman within 72hours

Funding Not stated

Conclusions Recommendations taken from the Joint Working Group of the British Blood Transfusion Society and the RCOG. Transfusion Medicine 1999, 9:93-7. RCOG guideline to be used in conjunction with the NICE guidance on anti-D prophylaxis for RhD negative women (No. 41). No indication of evidence basis for this guideline.

Quality

RID: 873 **Reference number** 967

Salisbury DM;Begg N;
Immunisation against infectious disease. 'The Green Book'

1996 HMSO **pgs**

Study Type: Reviews and Reports

Patient Characteristics General population

Intervention Immunisation against infectious disease

Comparisons -

Study Length -

Outcomes Protection against infectious disease

Effect Recommends that women testing seronegative for rubella following antenatal screening should be immunised after delivery and before discharge from the maternity unit. If rubella vaccination not given at this time, the GP must be informed and it should be given at the

Funding Not stated.

Conclusions

Quality

RID: 872 **Reference number** 962

Watson JC;Hadler SC;Dykewicz CA;Reef S;Phillips L;
Measles, mumps, and rubella--vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices (ACIP) **pgs**

1998 47 RR-8 MMWR Recomm Rep 1 57

Study Type: Reviews and Reports

Patient Characteristics General population

Intervention MMR vaccination

Comparisons -

Study Length -

Outcomes Protection against measles, mumps and rubella

Effect Recommendation for postpartum vaccination: women who do not have serologic evidence of rubella immunity or documentation of rubella vaccination should be administered the MMR vaccine before discharge from the hospital or birthing center

Funding Not stated

Conclusions

Quality

135 Is the six week postnatal checkup necessary to ensure the health of the mother

Grading: *3* *Non-analytic studies (for example, case reports, case series)*

RID: 1558 **Reference number** 4836

Bowers

Is the six weeks postnatal examination necessary?

1985 229 1410 **pgs** 1113 1115

Study Type: Cohort

Patient Characteristics A random sample of 210 women was selected (not further described). 55 GPs not described.

Intervention Views of mothers and general practitioners regarding the content of the pp exam

Comparisons Aspects of the pp exam including blood pressure, urine test, weight, vaginal examination, cervical smear, haemoglobin conraception, infant feeding, mother's feelings menstruation. A comparison between women and GPS reports of the exam was done.

Study Length Survey after 6 week exam

Outcomes Frequency percents

Effect 45% of women said they preferred a woman provider for pp check. Those who found their expectaions unfulfilled (29%) wanted more time for discussions, more consideration and a less rushed examination. Among pp problems causing concern, all could have been diagnosed largely from discussion and observation. 81% of women reported discussing contraception, 54% infant feeding, 78% maternal feelings.

Funding Maws Ltd. And the British Commonwealth Nurse War Memorial Fund

Conclusions GPs advised to keep a morbidity register and explore ways of changing the format of the postpartum examination

Quality + Self report of 190 women and only 54% of GPs surveyed and therefore bias likely

RID: 1559 **Reference number** 4837

Gunn, Lumley and Young

The role of the general practitioner in postnatal care

1998 48 434 **pgs** 1570 1574

Study Type: Cohort

Patient Characteristics GPs practicing in 10 rural and 9 metropolitan divisions in Victoria

Intervention Opinions about routine postnatal care

Comparisons Inclusions in the pp check up

Study Length NA

Outcomes Frequency percents and Ors

Effect GPs recommendations for 6 week check: 90.6% abdomen; 88.2% BP; 84.2% perineum; 77.5% vaginal examination; 65.5% Pelvic floor; 64.9% breast; 52.5% weight; 44.3% urine; 37% Pap; 98.7% infant feeding; 97.9% contraceptions. Fewer than half the sample believed that physical problems (urine and bowel symptoms, back problems), sexual issues, relationship and parenting issues should be routinely discussed. Female GPS are three times more likely to believe that maternal feelings should be discussed andd about twice as likely to believe that other maternal/infant lifestyle issues should be discussed.

Funding Unknown

Conclusions This study indicates that many general practitioners do not ask about common health problems postpartum.

Quality + This survey is self reported data. Sample size was 715 which gives weight to the findings

1.3 Chapter: 6 INFANT FEEDING

61 Does skin-to-skin contact contribute to successful breastfeeding?

Grading: *1++ High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 1325 **Reference number** 2874

Anderson GC;Moore E;Hepworth J;Bergman N;

Early skin-to-skin contact for mothers and their healthy newborn infants

2004 Issue 3 **pgs**

Study Type: Systematic Review

Patient Characteristics Mothers and babies

Intervention Skin to skin contact

Comparisons Benefit to breastfeeding

Study Length 1-3 months

Outcomes Meta analysis

Effect OR 2.15 (CI 1.10-4.22) for breastfeeding at one to three months in women with early skin to skin contact

Funding Cochrane

Conclusions Cochrane review that concludes that early skin-to-skin contact appears to have some clinical

benefit especially regarding breastfeeding outcomes and infant crying and has no apparent short or long-term negative effects. Researchers stated that most of the infants suckled during the Skin to skin intervention. Effective suckling may be a critical component of this intervention in regards to long term breastfeeding success. Timing may also be critical as most healthy fullterm infants will spontaneously grasp the nipple and begin to suckle by approximately 55 minutres postbirth. During the first 30 minutes postbirth they may only lick the nipple. After the first two hours postbirth, they often become sleepy and difficult to arouse. Also, because many primipara are so insecure during their first breastfeeding attempt, the intervention may be more successful if a clinician provides initial breastfeeding assistance.

Quality

RID: 1001 **Reference number** 4985

Ferber SG;Makhoul IR;

The Effect of Skin-to-Skin Contact (Kangaroo Care) Shortly after Birth on the Neurobehavioral Responses of the Term Newborn: A Randomized, Controlled Trial

2004 113 4 Pediatrics **pgs** 858 865

Study Type: Randomised Controlled Trial

Patient Characteristics 50 consecutively born infants

Intervention Effect of skin to skin contact on self regulation and neurobehavioural resposes in the term newborn

Comparisons 15-20 minutes of skin to skin bersus routine nursery care

Study Length 4 hours

Outcomes ANOVA multivariate analysis

Effect The treated infants jspend significantly more time in the sleep states and less time in transitional, fussy, crying and alert states (p=0.19). They also spent more time in quiet sleep (p=0.045) and had more flexed and less extended movements (p=0.03/0.04)

Funding Unknown

Conclusions Skin to skin seems to influence state organization and motor system modulation in newborns.

Quality ++

Grading: *1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 1000 **Reference number** 4984

Carfoot S;Williamson P;Dickson R;

A randomised controlled trial in the north of England examining the effects of skin-to-skin care on breast feeding

2005 21 1 Midwifery **pgs** 71 79

Study Type: Randomised Controlled Trial

Patient Characteristics PP women who delivered consecutively at Warrington Hospital, Cheshire

Intervention The effect of early skin to skin contact between mothers and their healthy full term babies on initiation and duration of breast feeding.

Comparisons Success of first breast feed, maternal satisfaction, baby body temperature 1 hour after birth and partial or exclusive breast feeding at 4 months

Study Length 4 months

Outcomes Rates of feeding and chi square

Effect NS difference in success of first brfeast feed and rate at 4 months. Maternal satisfaction was greater in the skin to skin group (p<0.001) 11% of babies in the skin to skin group were cooler than normal body temperature compared with 21% in the routine care group.

Funding North West Regional Health Authority

Conclusions

Quality + Maternal satisfaction is a subjective measure. There may have been interference from the research assistants.

RID: 1075 **Reference number** 33

Taylor PM;Maloni JA;Taylor FH;Campbell SB;

Extra early mother-infant contact and duration of breast-feeding

1985 316 Supp Acta paediatrica Scandinavica **pgs** 15 22

Study Type: Randomised Controlled Trial

Patient Characteristics Immediately pp women who were primiparous and breastfeeding

Intervention Extra early physical contact between mother and infant is associated with prolonged breastfeeding – ie skin to skin contact within 30 minutes of delivery vs infant in crib

Comparisons Length of breastfeeding for those with skin to skin contact and length of breastfeeding for those whose babies suckled during early contact.

Study Length 5 months

Outcomes Frequency percents; p values calculated but statistical test not identified

Effect NS difference for those who had early contact; however, when suckling occurred there was a greater incidence of breast-feeding at 2 months (p<0.001)

Funding Magee Women's Hospital Research Fund

Conclusions Early suckling, within first 30-70 minutes, may prolong breastfeeding.

Quality

RID: 1532 **Reference number** 4167

World Health Organization DoCHaD;

Evidence for the ten steps to successful breastfeeding

1998 WHO/CHD/98 **pgs** 111

Study Type: Systematic Review

Patient Characteristics Breastfeeding mothers and babies

Intervention NA

Comparisons NA

Study Length NA

Outcomes NA

Effect NA

Funding WHO

Conclusions This document provides the metholdology and research basis for the WHO 10 steps to Successful Breastfeedint.

Quality

Grading: ***2+*** ***Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance***

RID: 1159 **Reference number** 69

Baumgarder DJ;Muehl P;Fischer M;Pribbenow B;

Effect of labor epidural anesthesia on breast-feeding of healthy full- term newborns delivered vaginally

2003 16 1 Journal of the American Board of Family Practice **pgs** 7 13

Study Type: Cohort

Patient Characteristics Women who delivered full term newborns and were breastfeeding

Intervention Effect of epidural on early breastfeeding

Comparisons Mothers and babies who received epidurals and those who did not and effect on breastfeeding

Study Length 24 hours

Outcomes LATCH score compared by chi square test

Effect Two successful breast feedings within 24 hours were achieved by 69.9% of mother-baby units who had epidural compared with 81% of those who did not (crude OR 0.53, 0.28-1.03 p=0.04). These relations remained or were stregthened after controlling for age, parity, narcotics in labour and first breastfeeding within one hour. Overall there was only borderline statistical significante of primary outcome results. Although the p value was <0.05 the confidence intervals crossed one. Infants exposed to epidurals wee significantly mopre likely to receive a bottle suppplement while in hospital (OR 2.63, 1.43-4.58). This result may be hospital specific

Funding Unknown

Conclusions This study does not make a strong case (despite the author's concluding remarks) for the effect of epidural on breastfeeding in the first 24 hours.

Quality + Adequate power and valid assessment tool but differences which may be inherent in mothers who coose epidural versus those who do not may also influence breastfeeding decisions and have not been considered

RID: 1224 **Reference number** 592

Radzyminski S;

The effect of ultra low dose epidural analgesia on newborn breastfeeding behaviors

2003 32 3 Journal of Obstetric Gynecologic & Neonatal Nursing **pgs** 322 331

Study Type: Cohort

Patient Characteristic . Multiparous women at lest 18 years of age, who received no pain meds in labour except study drugs, had NSVD and healthy babies with normal pp course.

Intervention 28 mother infant dyads exposed to epidural analgesia and 28 dyads who were unmedicated Effect of low dose fentanyl and bupivacaine on initiation of breast feeding.

Comparisons Feeding behaviours in epidural and unmedicated groups.

Study Length 24 hours

Outcomes Measures of central tendency and ANOVA

Effect NS difference in breastfeeding behaviours of neonates born to mothers who received low dose analgesia and those who were unmedicated.

Funding Unknown

Conclusions This well designed cohort study was small but multiple methods were used to assess drug effect including cord blood, the Preterm Infant Breastfeeding Behavior Scale and a neurobehavior scale. The investigation was carefully executed. The results are believable. Hospital intervention in the form of epidural may not affect initiation of breastfeeding.

Quality

Grading: *4 Expert opinion, formal consensus*

RID: 1323 **Reference number** 2872

Singapore Ministry of Health;

Management of breastfeeding for healthy full-term infants.

2002 4 Singapore Ministry of Health **pgs** 89

Study Type: Guideline

Patient Characteristics Providers caring for lactating mothers

Intervention NA

Comparisons NA

Study Length Breast-feeding initiation and continua-tion

Outcomes NA

Effect

Funding Singa-pore Ministry of Health

Conclusions Primarily a nursing guideline. Most evidence based on grade 3 and 4 studies/expert opinion.

Quality

RID: 1360 **Reference number** 2939

Volmanen P;Valanne J;Alahuhta S;

Breast-feeding problems after epidural analgesia for labour: A retrospective cohort study of pain, obstetrical procedures and breast- feeding practices

2004 13 1 International Journal of Obstetric Anesthesia **pgs** 25 29

Study Type: Qualitative

Patient Characteristics Primips in Lapland average of 2.4 years after delivery

Intervention Questionnaire sent 2-3 years after delivery

Comparisons Epidural analgesia and problems in breastfeeding and early partial breast feeding or formula feeding. Early skin to skin and rooming in were also considered.

Study Length 2-3 years

Outcomes There appeared to be an association between epidural analgesia and problems in breast feeding and early partial breast feeding or formula feeding. Early skin to skin contact and

Effect rooming in were not linked with full breast feeding during the first months 67% of mothers who laboured with epidural and 29% of mothers who labored without epidural reported partial breast feeding or formula feeding (p=o.oo3).

Funding Unknown

Conclusions Small study and poor response rate mentioned. Analysis not discussed. There appeared to be an association between epidural analgesia and problems in breast feeding and early partial breast feeding or formula feeding. Early skin to skin contact and rooming in were not linked with full breast feeding during the first months of age. However, an adjusted analysis was not done. The researchers speculate that infants depressed by bupivacaine could be less capable of stimulating mother's milk production during the neonatal period.

Quality

Grading: *1++ High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 1241 **Reference number** 669

Donnelly A;Snowden HM;Renfrew MJ;Woolridge MW;

Commercial hospital discharge packs for breastfeeding women

2000 2 The Cochrane database of systematic reviews **pgs** CD002 075

Study Type: Systematic Review

Patient Characteristics North American women exclusively beastfeeding

Intervention Commercial discharge packs to no packs, non commercial packs and combinations of these.

Comparisons Rates of exclusive breastfeeding

Study Length Variable

Outcomes Meta analysis

Effect The giving of commercial hospital discharge packs appears to reduce the number of women exclusively breastfeeding at all times but has not significant effect upon the earlier termination of non-exclusive breastfeeding.

Funding Cochrane

Conclusions Metanalysis difficult due to heterogeneity of studies.

Quality

RID: 1324 **Reference number** 2873

Fairbank L;O'Meara S;Renfrew MJ;Woolridge M;Sowden AJ;

A systematic review to evaluate the effectiveness of interventions to promote the initation of breastfeeding

2000 4 25 Health Technology Assessment **pgs**

Study Type: Systematic Review

Patient Characteristics Postpartum women

Intervention Various promotional efforts for initiation of breastfeeding

Comparisons Breastfeeding rates

Study Length Variable

Outcomes Meta analysis was not carried out due to differences between studies. Data synthesis was therefore qualitative.

Effect RR and 95% CI were calculated where possible.

Funding NHS

Conclusions The purpose of this HTA was to evaluate evidence to identify which promotion programmes are effective at increasing the number of women who start to breastfeed. Results include: Institutional changes in hospital practices to promote breastfeeding can be effective including stand-alone interventions such as rooming-in or a package of interventions such as rooming in, early contact and health education. Peer support programmes when delivered as a stand alone

intervention to women in low income groups to be effective at increasing initiation and

Quality

RID: 92 **Reference number** 41

Panpanich R;Garner P;

Growth monitoring in children

2004 Issue 3 The Cochrane Library **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions This is a review to evaluate the impact of growth monitoring on either the child in relation to preventing death, illness or malnutirion or the mother in relation to nutritionalknowledge, anxiety or reassurance about the child's health and satisfaction with services.
Only two studes met inclusion criteria. Both were conducted in developing countries. In one study the nutritional status at 30 months in 500 children showed no difference between those allocated to growth monitoring and those not. In the other counselling improved mothers' knowledge of the growth chart at 4 months.The authors express surprise that there was so little research evaluating the potential benefits and harms of growth monitoring. They conclude that there is insuffiient reliable information to be confident about whether routine growth monitoring is of benefit to child health.

Quality ++

RID: 1488 **Reference number** 4211

Renfrew MJ;Wallace L;D'Souza L;Spiby H;Dyson L;

Effectiveness of public health interventions to promote the duration of breastfeeding: systematic reviews of the evidence: report to the Health Development Agency

2004 Health Development Agency **pgs**

Study Type: Systematic Review

Patient Characteristics Breastfeeding women

Intervention Duration of breastfeeding

Comparisons NA

Study Length NA

Outcomes No summary statistics. Outcomes for individual studies presented by topic area

Effect See previous comments

Funding HDA

Conclusions As yet unpublished report to HDA

Quality

RID: 1511 **Reference number** 4211

Renfrew MJ;Wallace L;D'Souza L;Spiby H;Dyson L;

Effectiveness of public health interventions to promote the duration of breastfeeding: systematic reviews of the evidence: report to the Health Development Agency

2004 Health Development Agency **pgs**

Study Type: Systematic Review

Patient Characteristics Breastfeeding women

Intervention Duration of breastfeeding

Comparisons NA

Study Length NA

Outcomes No summary statistics. Outcomes for individual studies presented by topic area

Effect See previous comments

Funding HDA

Conclusions As yet unpublished report to HDA

Quality

Grading: *1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 1391 **Reference number** 3218

Howard CR;Howard FM;Lanphear B;Eberly S;deBlieck EA;Oakes D;Lawrence RA;

Randomized clinical trial of pacifier use and bottle-feeding or cupfeeding and their effect on breastfeeding

2003 111 3 Pediatrics **pgs** 511 518

Study Type: Randomised Controlled Trial

Patient Characteristic Prenatal women who intented to breastfeed for at least 4 weeks; had uncomplicated singleton pregnancies and were undecided or wanted their infants to use a pacifier.

Intervention Use of pacifier at 2-5 days or after 4 weeks; cup versus bottle for supplemental feedings.

Comparisons Effect of above interventions on duration of breastfeeding

Study Length 1 year

Outcomes Chi square and Kruskal-Wallis test

Effect Supplemental feedings regardless of method had a detrimental effect on breastfeeding, p<0.0001.However when >2 supplements were given, cupfeeding significantly improved exclusive and full breastfeeding duration. P<.0001, p=.0018 respectively. Among infants delivered by c-section, cupfeeding significantly prolonged exclusive, full and overall breastfeeding (p value not given). Pacifier use in the neonatal period was detrimental to exclusive and overall breastfeeding, OR 1.5 (CI 1.0-2.0).

Funding Bureau of Maternal and Child Health

Conclusions This study looks at effects of supplementation and pacifier use on duration of breastfeeding.Overall, a well conducted study and associations likely to be accurate.

Quality

RID: 1158 **Reference number** 66

Martin-Calama J;

The effect of feeding glucose water to breastfeeding newborns on weight, body temperature, blood glucose,

and breastfeeding duration

1997 13 3 J Hum Lact **pgs** 209 213

Study Type: Randomised Controlled Trial

Patient Characteristic Full term newborns, of breastfeeding mothers who had vaginal deliveries and no risk factors for hypo or hyperglycemia.

Intervention Use of glucose water supplements

Comparisons Weight loss, serum glucose levels temperature and duration of breastfeeding

Study Length 5 months

Outcomes T test, chi square and fisher exact test

Effect In the non glucose water group there was a greater weight loss at 48 hours but not at 72 hours; temperatures higher than 37.5 C were more frequent, and the mean serum glucose levels at 6, 12 and 24 hours were lower but no infant exhibited hypoglycaemic symptoms. Infants in the glucose water group received twice as many formulas during the first month and had a shorter duration of any breastfeeding ($p<0.01$).

Funding Unknown

Conclusions Results show no benefit of glucose water supplementation in newborns. No hypoglycaemia or significant weight loss noted. Duration of breastfeeding in non glucose water babies was significantly longer. This study suggests that supplementation with glucose water may contribute to deficient lactogenesis. They also postulate that the temperature increases observed lack clinical significance except that increased temperature may cause increased metabolic rate and initial weight loss. As none of the infants without glucose water was seen to demonstrate clinical signs of hypoglycaemia the authors suggest that a serum glucose level of 1.7 mmol/liter (30 mg/dl) may be acceptable.

Quality

RID: 1514 **Reference number**

Singapore Ministry of Health;
Management of breastfeeding for healthy full-term infants.

2002 Singapore Ministry of Health **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions a. Is there an optimal (or minimum) frequency and duration of a breastfeed? Facilitate unrestricted breastfeeding 8-12 times per 24 hours Nurse infant on demand and/or every 2-3 hours whenever infant shows signs of hunger, such as increased alertness, activity, mouthing, rooting or crying Allow infant to nurse until satisfied, usually 10-15 minutes on each breast Arouse non-demanding infants in early weeks after birth, to nurse if 4 hours have elapsed since last nursing b. How should the baby be positioned for effective attachment of the baby to the breast? Hold the infant at the level of the breast and body facing the breast, with head and body aligned c. How can he mother successfully latch the baby on and off the breast? Steps for attachment Support the infant at the breast level with its body turned on the side and his mouth facing the nipple Support the breast with four fingers below and the thumb by the side, away from the areola. Tease the infants lower lip with the nipple to get him/her to open the mouth

Bring the infant to the breast when he/she opens the mouth wide. Make sure the infant grasps as much of the areola as possible Guide the mother to attach infant onto the breast and observe infant for signs of correct latch-on such as: Wide open mouth Flanged lips Chin touching the breast and the nose is free Observe infant for the following signs of milk transfer Sustained rhythmic suck/swallow pattern with occasional pauses Audible swallowing Relaxed arms and hands Moist mouth and Satisfaction after feeding Observe mother for the some of the following signs of milk transfer Strong tugging that is not painful Thirst Uterine contractions or increased lochia flow during or after feeding for the first 3-5 days Milk leaking from the opposite breast while feeding Relaxation or sleepiness Breast softening while feeding Nipple elongated after feeding

Quality

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 1268 **Reference number** 834

International Lactation Consultant Association.;
Evidence-based guidelines for breastfeeding management during the first fourteen days.

1999 **pgs** 31

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding
Conclusions a. Is there an optimal (or minimum) frequency and duration of a breastfeed? Facilitate unrestricted breastfeeding 8-12 times per 24 hours b. How should the baby be positioned for effective attachment of the baby to the breast? Hold infant at the level of the breast Body facing the breast with head and body aligned c. How can he mother successfully latch the baby on and off the breast? Observe infant for signs of correct latch-on such as: Wide open mouth Flared lips Nose, cheeks, and chin touching, or nearly touching, the breast Observe infant for signs of milk transfer Observe mother for signs of milk transfer

Quality

Grading: *2+ Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 1569 **Reference number** 4653

Broadfoot M;Britten J;Tappin D;MacKenzie J;
Baby friendly hospital initiative and breast feeding rates in Scotland

2005 90 2 **pgs** F114 F116

Study Type: Cohort
Patient Characteristics Babies born in Scotland between 1995 and 2002

Intervention Effect of Baby Friendly on breastfeeding rates at 7 days postpartum

Comparisons Chance of being breastfeed depending upon place of birth

Study Length 7 days

Outcomes Odds ratio

Effect Babies born in a hospital with the UK Baby Friendly Hospital Initiative standard award were 28% (P<0.001) more likely to be exclusively breastfed at 7 days of postnatal age than those born in other maternity units. From 1995 breastfeeding rates increased significantly faster in hopsitals with Baby Friendly status by 2002: 11.39% v 7.97%.

Funding Unknown

Conclusions The authors conclude that being born in a hospital that held the Baby Friendly award increased the chance of being brfeastfed in Scottish infants.

Quality + Results are b maternal report which has inherent biases

RID: 1110 **Reference number** 165

Brown S;Lumley J;

Reasons to stay, reasons to go: results of an Australian population- based survey

1997 24 3 Birth **pgs** 148 158

Study Type: Cohort

Patient Characteristics Women who were 6-7 months postpartum and gave birth in Victoria, Austrailia.

Intervention Early discharge and termination of breastfeeding

Comparisons Women discharged 24-48 hours, 3-4 days and 5 or more days.

Study Length 6 mos pp

Outcomes Chi square and ORs

Effect At all time intervals there were nonsignificant differences between women who were discharged within 48 hours and those who stayed 5 days or more. Women who left hospital on day three or four had significantly lower rates of breastfeeding in 5 of 6 time intervals compared to early or late discharge: Early discharge Late discharge OR 0.58 at 6 weeks OR 0.60 at 3 months OR 0.61 at 3 months OR 0.74 at 6 months OR 0.60 at 6 months

Funding Victorian Health Promotion Foundation

Conclusions This study is a survey and depends on maternal response and recall. Single women are underrepresented and therefore may limit the generalisability of this study. Multivariate analysis not done to address confounding. . Shortened length of hospital stay does not appear to have adverse effects on breastfeeding. We await further analysis of this data.

Quality

RID: 1423 **Reference number** 3506

Brown SJ;Alexander J;Thomas P;

Feeding outcome in breast-fed term babies supplemented by cup or bottle+

1999 15 2 Midwifery **pgs** 92 96

Study Type: Cohort

Patient Characteristics Babies who were supplemented in hospital

Intervention Bottle versus cup supplementation

Comparisons Duration of feeding based on type of supplementation

Study Length Discharge from midwifery care

Outcomes Chi square

Effect NS effect p=0.30.

Funding Unknown

Conclusions This is a retrospective chart review with no control over possible confounding variables. The sample size was small. Lack of power and non significant results need to e interpreted cautiously. Sample not divided by number of supplements received.

Quality

RID: 1189 **Reference number** 394

Cattaneo A;Buzzetti R;Baldissera M;Burmaz T;Cattaneo A;Centuori- S;Davanzo R;Pavan C;Romero SQ;Esposito L;Mastropasqua S;Benettina FM;Montenegro C;Pontrelli M;Gatto A;La GG;Procopio S;Romano A;Santelli AM;Spagnolo G;Aiello A;Chiappetta- G;Corchia C;De RA;

Effect on rates of breast feeding of training for the baby friendly hospital initiative

2001 323 7325 British Medical Journal **pgs** 1358 1362

Study Type: Intervention Study -Non randomised

Patient Characteristics Pp patients at 8 Italian hospitals

Intervention Training of staff in WHO Unicef breastfeeding programme.

Comparisons Trained versus untrained groups, before and after

Study Length 6 months

Outcomes Logistic regression

Effect In both groups the differences before and after training in exclusive breast feeding at discharge, full breast feeing at three months and any brfeast feeding at six months are significant , at least $p<0.05$.

Funding Instituto per l'Infanzia, Trieste

Conclusions A complex cluster design with some confounding, loss to follow up and incompleteness of data may affect interpretation of data. However there is a significant difference in breastfeeding at discharge in all settings which suggests that the effect of intervention is real.

Quality

RID: 830 **Reference number** 58

Dewey KG;Nommsen-Rivers LA;Heinig MJ;Cohen RJ;

Risk factors for suboptimal infant breastfeeding behavior, delayed onset of lactation, and excess neonatal weight loss

2003 112 3 Pt 1 Pediatrics **pgs** 607 619

Study Type: Cohort

Patient Characteristic Women who gave birth to a healthy single term infant and who were willing to attempt to breastfeed exclusively for at least one month

Intervention Risk factors for suboptimal breastfeeding, delayed onset of lactation and excess neonatal weight loss

Comparisons Incidence ofsuboptimal breastfeeding, delayed onset of lactation and excess neonatal weight loss compared to maternal factors, labour and delivery events, and infant factors

Study Length 14 days

Outcomes RR

Effect The prevalence of SIBB was 49% on day 0, 22% on day 3, and 14% on day 7. SIBB at day 3 was significantly associated with several modifiable risk factors or factors which might prompt additional support: primiparity (RR 2.39 [1.16-3.86]), flat or inverted nipples (2.57 [1.22-3.96],

use of nonbreast milk fluids in first 48 hours (RR3.08 [1.78-4.40]),pacifier use(2.74 [1.49-4.00]). Delayed onset of lactation occurred in 22% of women and 12% of infants had weight loss greater than 10% of their body weight on day 3.

Funding NIH and WHO

Conclusions Yes, this study highlights the need for breastfeeding support and suggests that breastfeeding mothers should be evaluated at 72 to 96 hours postpartum.

Quality + Multiple assessments with a validated tool, supported by additional physiological evidence strengthens the outcomes of this study.

RID: 1214 **Reference number** 557

DiGirolamo AM;Grummer-Strawn LM;Fein S;

Maternity care practices: implications for breastfeeding

2001 28 2 Birth **pgs** 94 100

Study Type: Cohort

Patient Characteristic Women who initiated breastfeeding and who prenatally had expressd the intention to breastfeed for more than 2 months.

Intervention Baby Friendly practices and termination of breastfeeding.

Comparisons Percentage of women who stopped breastfeeding before 6 weeks by specific hospital practices and the percentage of women who stopped breastfeeding before 6 weeks by the number of Baby Friendly Hospital Initiative practices they experienced.

Study Length 6 weeks pp

Outcomes Chi square test for trend and ORs

Effect Test for trend, p=0.0001. Only 7% of women in this study experienced all 5 Baby Friendly practices under evaluation. Adjusted OR for early termination by number of practices (results significant at p<.05 are in bold): None 7.7 One 4.5 Two 4.0 Three 3.1 Four 1.7 Five 1.0

Funding Unknown

Conclusions This study is a longitudinal survey and is dependant upon maternal recall and response. However, the results show a clear dose response relationship and a significant test for trend. . BabyFriendly practices may have a cumlative effect on breastfeeding termination

Quality

RID: 1306 **Reference number** 1611

Glover J;Sandilands M;

Supplementation of breastfeeding infants and weight loss in hospital

1990 6 4 J Hum Lact **pgs** 163 166

Study Type: Cohort

Patient Characteristic Women who gave birth to full term healthy babies who indicated at hospital admission that they planned to breastfeed

Intervention Supplementation of breast fed babied with glucose water or formula.

Comparisons Weight loss in supplemented vs. unsupplemented babies.

Study Length Until hospital discharge

Outcomes T test and chi square

Effect P<.03 for birth weight loss

Funding Unknown

Conclusions Straightfo-rward chart review likely to be accurate. However it was not possible to determine if the mothers requested supplementation for their babies or if is was ordered by physicians.

Quality

RID: 1238 **Reference number** 651

Hamelin K;McLennan J;

Examination of the use of an in-hospital breastfeeding assessment tool

2000 5 3 Mother Baby Journal **pgs** 29 37

Study Type: Cohort

Patient Characteristics Postpartum breastfeeding mothers before and after implementation of LATCH tool.

Intervention Assessment of effective breastfeeding

Comparisons Length of BF before and after implementation of tool

Study Length 6 weeks

Outcomes Frequency percents

Effect No p value given. 50% of pre-LATCH and 49% of post-LATCH groups still breastfeeding exclusively at 6 weeks.

Funding Unknown

Conclusions This study represents a limited assessment with the LATCH tool for breastfeeding by newly trained postpartum staff. The results do not demonstrate a difference in breastfeeding outcomes after use of the tool. However, the tool may provide a way to give consistent BF instructions to women by hospital staff.

Quality

RID: 1298 **Reference number** 1470

Hillervik LC;

Studies on perceived breast-milk insufficiency: relation to attitude and practice

1992 24 3 Journal of Biosocial Science **pgs** 413 425

Study Type: Cohort

Patient Characteristics PP women who planned to breastfeed for 6 months

Intervention Lactation “crisis” and continuation of breastfeeding

Comparisons Duration of feeding in those with and without lactation crisis.

Study Length 6 months

Outcomes Chi square

Effect No difference was found in relation to the breastfeeding behaviour between the two groups. The researchers postulate that the opportunity for women to discuss breast feeding problems at home visits and telephone contacts during the study may have provided essential support.

Funding The Public Orphanage Foundation and the Fculty of Medicine, University of Uppsala.

Conclusions This study looks at attitudes of breastfeeding women who had lactational crisis (insufficiency) and those who did not have crisis. This study involves maternal interviews and is dependant on mothers recording weights, time frequencies and keeping diaries. There are opportunities for bias/error to occur in this study.

Quality

RID: 1393 **Reference number** 3220

Ingram J;Johnson D;Greenwood R;

Breastfeeding in Bristol: teaching good positioning, and support from fathers and families

2002 18 2 Midwifery **pgs** 87 101

Study Type: Cohort

Patient Characteristics PP women who delivered at St. Michael's Hospital, South Bristol

Intervention Duration of breastfeeding, milk sufficiency

Comparisons Before and after the intoroduction of the 'hands off' feeding technique in which the midwife does not position the baby at the breast but the mother is taught to do this

Study Length 6 weeks pp

Outcomes Chi square

Effect Significant increases were observed in mothers exclusively breastfeeding at two weeks ($p<0.001$) and six weeks ($p<0.02$). The incidence of perceived milk insufficiency decreased significantly ($p=0.02$). Mothers with high scoes for the 'hands off' technique were significantly more likely to be breastfeeding at six weeks compared with those who did not use all the elements of the technique (OR 2.4, CI 1.3-4.3).

Funding Unknown

Conclusions e. How should the mother position herself to facilitate effective breastfeeding? Mother should make herself comfortable, support the back with cushions to sit upright. Feet should be flat on floor/steel/book to keep her lap level

Quality + The responses were self reported and therefore subject to bias; sample size was large but instituational changes may have affected outcomes

RID: 1119 **Reference number** 186

Labarere J;Castell M;Fourny M;Durand M;Pons JC;

A training program on exclusive breastfeeding in maternity wards

2003 83 1 International Journal of Gynaecology & Obstetrics **pgs** 77 84

Study Type: Cohort

Patient Characteristics Women who gave birth to a healthy infant, singleton or twins.

Intervention Impact of a training program for maternity health professionals on maternity ward practices and on the rate of exclusive breastfeeding at discharge.

Comparisons Before and after training

Study Length Hospitalisation

Outcomes Chi square and t tet

Effect The rate of exclusive breastfeeding increased from 15.8% in before sample to 35.2% in the after sample ($p<0.01$). Adjusted OR 2.74.

Funding Unknown

Conclusions This is an uncontrolled before and after study and does not look at long term results. Blinding was not possible. Secular trends may have affected results. However, differences were significant after training of staff and it is likely that the 3 day training did contribute to practices which support breastfeeding.

Quality

RID: 1153 **Reference number** 305

Philipp BL;Malone KL;Cimo S;Merewood A;

Sustained breastfeeding rates at a US baby-friendly hospital

2003 112 3 Pt 1 Pediatrics **pgs** e234 e236

Study Type: Cohort

Patient Characteristics Infants who were admitted to the BMC newborn service for 2000 and 2001.

Intervention Sustained breastfeeding rates

Comparisons Breastfeeding rates in 1999 were compared with rates in 2000 and 2001.
Study Length Hospitalisa-tion
Outcomes Chi square and frequency percents
Effect Breastfeeding initiation rates remained at high levels: 87% in 1999, 82% in 2000, 87% in
Funding Unknown
Conclusions Baby Friendly Initiative interventions appear to be sustained over time.
Quality

RID: 1240 **Reference number** 666

Schlomer JA;Kemmerer J;Twiss JJ;

Evaluating the association of two breastfeeding assessment tools with breastfeeding problems and breastfeeding satisfaction

1999 15 1 J Hum Lact **pgs** 35 39

Study Type: Cohort
Patient Characteristics PP breastfeeding women
Intervention Use of breastfeeding tool to predict satisfaction and probems
Comparisons Differences within and between groups using either LATCH or IBFAT tools on outcome
Study Length 1 week pp
Outcomes Paired t test
Effect No significant differences between groups, indicating similar levels of satisfaction and problems between groups. However, as scores on both tests increased, breastfeeding problem scores tended to decrease. The ability to detect significant associations between assessment scores and breastfeeding problems may have been limited by small sample size of this pilot study.
Funding Unknown
Conclusions This study involves maternal assessment via either the LATCH tool or the IBFAT tool Although assistance is available through the data collectors there are opportunities for bias/error to occur in this study. A predictive tool is needed. A larger sample and longer follow up are indicated.
Quality

RID: 1082 **Reference number** 55

Waldenstr÷m U;Aarts C;

Duration of breastfeeding and breastfeeding problems in relation to length of postpartum stay: a longitudinal cohort study of a national Swedish sample

2004 93 5 Acta Paediatrica **pgs** 669 676

Study Type: Cohort
Patient Characteristic Swedish speaking women at all antenatal clinics in Sweden during 3 wk evenly spread over 1 year in 1000 to 2000.
Intervention Duration of breastfeeding and breast feeding problems in relation to length of postpartum stay
Comparisons Six groups according to length of pp stay and median duration of any breastfeeding
Study Length 1 year
Outcomes Kaplan Meyer
Effect No significant difference between duration of breastfeeding and length of stay: log rank test p=0.66.
Funding Unknown
Conclusions This is a questionnaire survey and dependant on maternal report but women likely to recall length of breast feeding.
Quality

Grading: *3* *Non-analytic studies (for example, case reports, case series)*

RID: 1243 **Reference number** 672

Bick DE;MacArthur C;Lancashire RJ;

What influences the uptake and early cessation of breast feeding?

1998 14 4 Midwifery **pgs** 242 247

Study Type: Cohort

Patient Characteristic PP women who responded to postl questionnaire after delivery at Birmingham Women's Hospital between April and September 1992 and who subsequently agreed to be interviewed

Intervention Factors associated with initiation and early cessation of breast feeding

Comparisons Women who did not breastfeed with those who did; women who stopped breastfeeding at <12 weeks and those who carried on beyond 3 months.

Study Length 45 weeks after delivery

Outcomes Ors

Effect Three factors were found to be associated with non-initiation: unmarried status (p=0.0001; OR 2.25, 1.50-3.37), multiparity (p=0.0037; OR 1.54, 1.05-2.27); general anaesthesia (p=0.0031; OR 1.97, 1.09-3.54). Three predictors were found for early cessation: return to work within three months (p=0.0001, OR 3.16, 1.50-6.67); regular child care suppor form female family members (p=0.0006, OR 1.42, 1.09-1.85), a score of 12 or over on the fEPDS p=0.0021, OR 1.93, 1.11-3.35).

Funding Department of Health

Conclusions This survey identifies factors which may be modifiable for non-initiation and cessation of breastfeeding.

Quality + Large survey of self selected women but size of study likely to provide robust results

RID: 1415 **Reference number** 3352

Carter-Spaulding DE;Kearney MH;

Parenting self-efficacy and perception of insufficient breast milk

2001 30 5 Journal of Obstetric Gynecologic & Neonatal Nursing **pgs** 515 522

Study Type: Cohort

Patient Characteristics Women recruited for pediatricians office

Intervention Breastfeeding patterns, perception of insufficient milk, parenting self efficacy and predictors of perceived insuficient milk

Comparisons Differences between primips and multips

Study Length Cross-sectional design of mothers with infants 1-11 weeks

Outcomes mean and standard deviation and pearson's r

Effect Correlation , r=.49, p<.01, for parenting self efficacy and insufficient milk

Funding Unknown

Conclusions The moderate correlation between parenting self-efficacy and perceived milk supply suggests that mothers who perceive that they have the skills and competence to parent a young infant also perceive that they have a adequate breast milk supply.

Quality + This was a self selected survey which collected subjective information - subject to bias on all these points

Grading: *4 Expert opinion, formal consensus*

RID: 1421 **Reference number** 3495

Dykes F;Williams C;

Falling by the wayside: a phenomenological exploration of perceived breast-milk inadequacy in lactating women

1999 15 4 Midwifery **pgs** 232 246

Study Type: Qualitative

Patient Characteristic Postnatal women , primiparous, delivered at term with normal birth weight babies who planned to exclusively breastfeed for 3 months

Intervention Three in depth home interviews

Comparisons NA

Study Length NA

Outcomes NA

Effect NA

Funding Unknown

Conclusions This study investigates women's perceptions related to the adequacy of their breast milk. Four themes were identified around issue of sufficiency: Quest to quantify and visualise amount of milk Dietary concerns – "My milk is what I eat." Breast feeding as a challenging journey with feeding practices which may undermine milk production, incorrect and conflicting advice from midwives and health visitors, and interpretation of baby's behaviour and feeding patterns "Giving out" and the need for support, nurturing and replenishment. Perceived breast milk inadequacy is underpinned by a complex and synergistic interaction between socio-cultural influences, feeding management, the baby's behaviour, lactation physiology and the woman's

Quality

RID: 1352 **Reference number** 2930

Palda VA;Guise JM;Wathen CN;the Canadian Task Force on Preventive Health Care;

Interventions to promote breastfeeding: updated recommendations from the Canadian Task Force on Preventive Health Care

2003 CTFPHC Tec Canadian Task Force on Preventive Health Care **pgs**

Study Type: Guideline

Patient Characteristics Breastfeeding mothers

Intervention NA

Comparisons NA

Study Length NA

Outcomes Interventions to promote breastfeeding

Effect NA

Funding Canadian govern-ment

Conclusions Evidence based guidelines make recommenda-tions for breastfeeding support, rooming in and discharge packs. These are summarised in the narrative.

Quality

RID: 1229 **Reference number** 604

Shaw FA;
Management of common breastfeeding problems

2002 75 11 Community Practitioner **pgs** 432 435

Study Type: Reviews and Reports

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions e. How should the mother position herself to facilitate effective breastfeeding? Mother should sit upright, with her back well supported. Her feet should be flat on the floor or on a footstool

Quality

RID: 1509 **Reference number** 2944

Winikoff B;Laukaran VH;Myers D;Stone R;
Dynamics of infant feeding: mothers, professionals, and the institutional context in a large urban hospital

1986 77 3 Pediatrics **pgs** 357 365

Study Type: Qualitative

Patient Characteristic Postdischarge interviews were completed in the pediatric outpatient clinic with 21 mothers who delivered at the hospital andhad attempted breastfeeding within 2 months of the interview.

Intervention Direct observation for a three month period was conducted in various inpatient and outpatient units; chart review was done on all available charts for one month; questionnaires were

Comparisons distributed to all women who delivered within a 15 day period and met eli NA

Study Length Breas-tfeeding within two months of interview

Outcomes Direct observation results involved summary of findings which focused on hospital routine as it related to breastfeeding; Chart review involved frequency percents of breastfeeding and

Effect supplementation. Maternal interviews included reasons for feeding choi See comments for results of interviews

Funding Unknown

Conclusions Many interesting observations about hospital barriers; Lack of simple and systematic method of identifying breastfeeding mothers and babies Formula bottles routinely distributed to breastfeeding mothers at each feeding Breast pumps were routinely distributed to breastfeeding mothers often before they were given the opportunity to nurse their infants Instructions for correct use of the breast pumps seldom given Staff did not appreciated the need for frequent demand feeding to establish lactation Gift packs at dischargecontained infant formula Pediatric clearance required before initiation of breatfeeding All babies had routine bottle orders Routine orders for lactation suppressant medication 40% of all infants admitted to special care nursery and separated from mothers Modified rooming in meant that very few mothers had access to their babies during the complete 24 hour cycle of the hospital stay.

Quality

Comments Many interesting observations about hospital barriers; Lack of simple and systematic method of identifying breastfeeding mothers and babies Formula bottles routinely distributed to breastfeeding mothers at each feeding Breast pumps were routinely distributed to breastfeeding mothers often before they were given the opportunity to nurse their infants Instructions for correct use of the breast pumps seldom given Staff did not appreciated the need for frequent demand feeding to establish lactation Gift packs at dischargecontained infant formula Pediatric clearance required before initiation of breatfeeding All babies

had routine bottle orders Routine orders for lactation suppressant medication 40% of all infants admitted to special care nursery and separated from mothers Modified rooming in meant that very few mothers had access to their babies during the complete 24 hour cycle of the hospital stay. Relevant Unclear Limited

RID: 1365 **Reference number** 2944

Winikoff B;Laukaran VH;Myers D;Stone R;

Dynamics of infant feeding: mothers, professionals, and the institutional context in a large urban hospital

1986 77 3 Pediatrics **pgs** 357 365

Study Type: Qualitative

Patient Characteristics PP women

Intervention Observa-tion and interviews to assess hospital barriers to breastfeeding

Comparisons NA

Study Length Within 2 months of attempted breast-feeding

Outcomes Direct observation results involved summary of findings which focused on hospital routine as it related to breastfeeding; Chart review involved frequency percents of breastfeeding and

Effect supplementation. Maternal interviews included reasons for feeding choi Many interesting Observations about hospital barriers: Lack of simple and systematic method of identifying breastfeeding mothers and babies Formaula bottles routinely distributed to breastfeeding mothers at each feeding Breast pumps were routinely distributed to breastfeeding mothers often before they were given the opportunity to nurse their infants Instructions for correct use of the breast pumps seldom given Staff did not appreciated the need for frequent demand feeding to establish lactation Gift packs at dischargecontained infant formula Pediatric clearance required before initiation of breatfeeding All babies had routine bottle orders Routine orders for lactation suppressant medication 40% of all infants admitted to special care nursery and separated from mothers Modified rooming in meant that very few mothers had access to their babies during

Funding Ford Founda-tion

Conclusions Data gathered to serve as a guideline for later actions and not for the purpose of establishing causal relationships.

Quality

74 Problems (Maternal) What should be done to prevent, identify and treat breastfeeding problems? Note: Sore nipples, painful nipples and nipple trauma Breast pain Breast engorgement Inverted nipples

Grading: *1++ High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 1433 **Reference number** 4111

MAIN Trial Collaborative Group

Preparing for breast feeding: treatment of inverted and non-protractile nipples in pregnancy. The MAIN Trial Collaborative Group

1994 10 4 Midwifery **pgs** 200 214

Study Type: Randomised Controlled Trial

Patient Characteristic: Prenatal women with at least one inverted or non-protractile and a singleton pregnancy, recruited between 25 completed and 35 completed weeks of pregnancy

Intervention

Comparisons: Hoffman's exercises and breast shells 1. exercises and shells 2. exercises and no shells 3. no exercise and shells 4. no exercise and no shells

Study Length

Outcomes: Breast feeding at 6 weeks as self reported by postal question-aire

Effect

Funding

Conclusions: Breast feeding at 6 weeks postpartum: exercises and shells (42 %), exercises and no shells (38%), no exercises and shells (17%) no exercises and no shells (63%) Nipple bleeding: exercises (18 %), no exercises (38%) difference -19%, (95% CI -26% to -10%) shells (29%) no shells (27%) difference 2%, (95% CI -6% to 10%) Breast infection exercises (6%), no exercises (14%) difference -8%, (95% CI -13% to -2%) shells (21%) no shells (24%) difference -1%, (95% CI -7% to 14%)

Quality

RID: 1371 **Reference number** 2952

Snowden HM;Renfrew MJ;Woolridge MW;

Treatments for breast engorgement during lactation

2004 Issue 2 The Cochrane Library **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions: Serrapeptase resulted in total improvement rate of engorgement symptoms compiled from the following: breast pain, breast swelling and induration of lactation (OR 3.6, 95% Confidence Interval 1.27-10.26). Analysis of individual symptoms showed that Serrapeptase did not have a significant effect compared with placebo. Bromelain/trypsin protease complex significantly decreased symptoms of engorgement namely pain and swelling (OR 8.02, 95% Confidence Interval 2.76-23.3). Room temperature cabbage leaves, chilled cabbage leaves and chilled gel packs decreased pain symptoms post-treatment (37%, 38% and 39%, respectively). The use of oxytocin, ultrasound, cabbage leaf extract or cold packs have no effect on symptoms of breast engorgement.

Quality

Grading: ***1+*** ***Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias***

RID: 1134 **Reference number** 230

Alexander JM;Grant AM;Campbell MJ;
Randomised controlled trial of breast shells and Hoffman's exercises for inverted and non-protractile nipples

1992 304 6833 Brit Med J **pgs** 1030 1032

Study Type: Randomised Controlled Trial

Patient Characteristic Prenatal women with at least one inverted or non-protractile, and a singleton pregnancy, nulliparous, recruited between 25 completed and 35 completed weeks of pregnancy

Intervention

Comparisons Hoffman's exercises and breast shells 1. exercises and shells 2. exercises and no shells 3. no exercise and shells 4. no exercise and no shells

Study Length

Outcomes Anatom-ical change of nipples judged blindly before first breast-feeding and Breast feeding at 6 weeks as self reported by postal question-aire

Effect

Funding

Conclusions Breast feeding at 6 weeks postpartum: exercises and shells (46 %), exercises and no shells (45%), no exercises and shells (43%) no exercisse and no shells (45%) Nipple bleeding: exercises (23 %), no exercises (31%) difference -8%, (95% CI -26% to --9%) shells (29%) no shells (25%) difference 4%, (95% CI -14% to 22%) Breast infection exercises (12%), no exercises (6%) difference 6%, (95% CI -5% to -18%) shells (12%) no shells (6%) difference 6%, (95% CI -5% to 18%)

Quality

RID: 1530 **Reference number** 4161

Hager WD;Barton JR;
Treatment of sporadic acute puerperal mastitis

1996 4 2 **pgs** 97 101

Study Type: Randomised Controlled Trial

Patient Characteristic Women with mastitis – temp>37.56 plus tenderness to palpation of the breast and segmental erythema.

Intervention Treatment with amoxicillin vs cephradine

Comparisons Resolution of symptoms

Study Length Until symptoms resolve

Outcomes Fisher's exact test and frequencies

Effect P values not given. Two amox. Treatment failures (+ culture for staph aureus) and 1 recurrence with amox (+ staph aureus at time of recurrence) and 2 recurrences with cephradine (- cultures at time of recurrence)

Funding Unknown

Conclusions Although the methodology is good, the study is underpowered. The results however are interesting and warrant further research. Staphylocci were the most frequent isolates from breastmilk of infected mothers. All the staph isoltes were resistant to penicillin and sensitive to cephalosporins. The two treatment failures (+ staph aureus culture at time of recurrence) and one recurrence were all positive for staph aureus and treated initially with amoxicillin. There were two recurrences among the cephradine group but cultures at time of recurrence were negative. The authors conclude that the penicillin resistance noted would lead then to recommend a B lactamase resistant antibiotic along with moist heat and continued

Quality

RID: 1507 **Reference number** 4997

Ingelman-Sunberg A

Early puerpereal breast engorgement

1953 32 4 Acta Obstetrica et Gynecologica Scandinavica **pgs** 399 402

Study Type: Randomised Controlled Trial

Patient Characteristics PP women with early engorgement

Intervention Oxytocin versus saline on the theory that if engorgement is caused by accumulation of milk the injection of oxytocin should help the child empty the breast

Comparisons Number of doses of medication and amount of milk produced

Study Length 7 days

Outcomes Amount of milk produced;no statistical measures presented

Effect No difference in amount of milk produced between two groups

Funding Unknown

Conclusions The authors conclude that the problem in early engorgement is not accumulation of milk but oedema and hyperaemia. Therefore painful manual expression of milk can be abandoned and women treated with hot packs , salicylic acid and codein etc. and a supportive bra.

Quality + Measurement technique for amount of milk produced not described. Study sample small

RID: 1369 **Reference number** 2950

Page T;Lockwood C;Guest K;

Management of nipple pain and/or trauma associated with breast-feeding

2003 1 4 JBI Reports **pgs** 127 147

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions Prevention of nipple pain/trauma warm water compresses for the prevention of nipple pain keeping nipples clean and dry for the prevention of cracked nipples Treatment of nipple pain/trauma warm water or tea bag compresses are recommended for the reduction of nipple pain/trauma hydrogel dressings are associated with a high incidence of infections and their use cannot be recommended expressed breast-milk reduces the duration of cracked nipples systemic antibiotics are recommended if a positive culture for S. aureus is obtained

Quality

RID: 1450 **Reference number** 4128

Roberts KL;Reiter M;Schuster D;

A comparison of chilled and room temperature cabbage leaves in treating breast engorgement.

1995 11 3 Journal of Human Lactation **pgs** 191 194

Study Type: Randomised Controlled Trial

Patient Characteristics

Intervention
Comparisons
Study Length
Outcomes
Effect
Funding
Conclusions
Quality + A self administered questionnaire was used to collect descriptive data.

RID: 1513 **Reference number**
Singapore Ministry of Health;
Management of breastfeeding for healthy full-term infants.
2002 Singapore Ministry of Health **pgs**
Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding
Conclusions Treatment of nipple pain` remove and re-attach infant to ensure proper latch on if nipple pain continues after the initial attempt detach infant from the breast by inserting a finger into the corner of the infant's mouth apply breast milk to the sore nipples after feed and air dry to aid healing. Use modified lanolin or very sore and cracked nipples Use different feeding positions to reduce pressure on the sore nipple Teach mother to express her milk for a day or two until her nipples have healed if she cannot tolerate the idea of feeding. Feed infant temporarily using alternative methods Engorgement prevention No delay in initiating breastfeeding Effective positioning of infant Unrestricted breast feeding patterns Engorgement management Ensure mother is comfortable Frequent, effective feeding to minimize swelling Apply cold cabbage leaves or gel packs on engorged breast to reduce swelling. This measure is used with breast massage, milk expression and analgesia Avoid hot compresses unless breasts are leaking Breast massage massage the entire breast gently, both top and underside in a circular manner starting from the top, stroke the breast in a downward manner towards the nipple do this several times so that the whole breast is massaged Hand expression place the thumb and finger diagonally opposite on the edge of the areola gently press inward towards the centre of the breast and squeeze the finger and thumb together repeat the rhythmic movement move fingers around the areola and express to empty all the sectors of the breast
Quality

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 1504 **Reference number** 4975
Murata T;Hanzawa M;Nomura Y;
The clinical effects of 'protease complex' on postpartum breast engorgement (based on the double blind

1965 12 3 J Jpn Obstet Gynecol Soc **pgs** 139 147

Study Type: Randomised Controlled Trial

Patient Characteristics PP women with engorgement

Intervention Protease versus placebo

Comparisons Swelling, pain between groups

Study Length Unclear

Outcomes Chi square

Effect There was a significant difference with use of protease complex, p=.05

Funding Unknown

Conclusions Poorly reported study. There are many unknown feature of design. This study should be repeated in a larger sample and in a more rigourous manner.

Quality - Drug trial without explanation of randomisation, blinding or allocation concealment

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 1006 **Reference number** 4991

Griffiths DM;

Do tongue ties affect breastfeeding?

2004 20 4 Journal of Human Lactation **pgs** 409 414

Study Type: Cohort

Patient Characteristics Babies un der 3 months with major problems breastfeeding and diagnosed tongue tie

Intervention Feeding success; crying with division

Comparisons Feeding before and after surgery

Study Length 3 months

Outcomes Frequency percents

Effect Within 24 hourse 80% of babies were feeding better and 64% breastfed for at least 3 months (UK average is 30%)

Funding Unknown

Conclusions Initial assessment, diagnosis and help followed by division and subsequent support by a qualified lactation consultaqnt might ensure that even more mothers and infants benefit from

Quality + Feeding assessment was by maternal report and mothers were not blinded to treatment. However, dramatic improvements were noted immediately

RID: 1483 **Reference number** 4185

Humenick SS;Hill PD;Anderson MA;

Breast engorgement: patterns and selected outcomes

1994 10 2 J Hum Lact **pgs** 87 93

Study Type: Cohort

Patient Characteristics First and second time breastfeeding mothers

Intervention

Comparisons Rate level of breast engorge-ment between feedings in the morning and evening for 14 days

following birth

Study Length

Outcomes Pattern of breast engorgement

Effect

Funding

Conclusions 4 patterns of breast engorgement emerged from the groupings of 114 breast engorgement experience graphs bell shaped engorgement (40%) multimodal engorgement (16%) intense engorgement (20%) minimal engorgement (24%)

Quality

RID: 1115 **Reference number** 179

Osterman KL;Rahm VA;

Lactation mastitis: bacterial cultivation of breast milk, symptoms, treatment, and outcome

2000 16 4 Journal of Human Lactation **pgs** 297 302

Study Type: Cohort

Patient Characteristic Women diagnosed with lactation mastitis and having a temperature >38 and at least two symptoms of mastitis: erythema, tenderness or swelling

Intervention Infectious agents in breast milk and response to treatment

Comparisons Response to treatment of women with normal skin flora in breast milk versus those with pathogenic organism

Study Length Until resolution of symptoms

Outcomes Chi square and frequency percents.

Effect 61% of the women had bacteria consistent with normal skin flora (group A); 39% of women had pathogenic bacteria present (group B). All of the women in group A continued to breastfeed and use conservative measures included frequent nursing, followed by hand expression if needed; good feeding technique and rest. 13 (81%) of the women in group B developed severe complications such s abcess or septic fever. Antibiotics were prescribed for 9 women in

Funding Unknown

Conclusions This is a well designed cohort study but the study population is small and self selected. The study shows that a culture of breastmilk may help to determine which women require antibiotic

Quality

RID: 1451 **Reference number** 4129

Roberts KL;

A comparison of chilled cabbage leaves and chilled gelpaks in reducing breast engorgement

1995 11 1 Journal of Human Lactation **pgs** 17 20

Study Type: Cohort

Patient Characteristics PP women with engorgement and lactating

Intervention Treatment with cabbage leaves or with chilled gel packs

Comparisons Each woman was treated on one breast with cabbage leaves and on the other with gel packs

Study Length 8 hours

Outcomes Paired t test

Effect The post test pain scale rting for cabbage leaves was 4.1 and for gelpacks was 3.7 There was a statistically significant reduction of pain with both treatments but no significant difference in the mean post-treatment scores of cabbage leaves and gelpacks.

Funding Unknown

Conclusions Cold thereapy appears to relieve the pain of engorgement.

Quality + Small sample and subjective pain rating. Difficulties distinguishing pain levels

from one breast to another not discussed

Grading: ***2-*** ***Case–control or cohort studies with a high risk of confounding bias, or chance and a significant***

RID: 1552 **Reference number** 178

Devereux WP;

Acute puerperal mastitis. Evaluation of its management

1970 108 1 **pgs** 78 81

Study Type: Cohort

Patient Characteristics Breastfeeding women with fever and area of erythema and edema on breast

Intervention Treatment of women with mastitis with sulfisoxazole initially.

Comparisons Resolution of mastitis within the treated group

Study Length Until resolution of symptoms

Outcomes Frequencies

Effect Not calculated statistically

Funding Unknown

Conclusions This small observational study done over many years(20) in a private practice does not include a standard treatment protocol or comparison group. He concludes however that there were 8 abcesses and in 6 of these treatment was delayed longer than 24 hours.

Quality

RID: 1531 **Reference number** 4164

Niebyl JR;Spence MR;Parmley TH;

Sporadic (nonepidemic) puerperal mastitis

1978 20 2 Journal of Reproductive Medicine **pgs** 97 100

Study Type: Cohort

Patient Characteristic Women diagnosed with lactation mastitis and having a temperature >38 and segmental erythema in the affected breast.

Intervention Study of infectious agents in breast milk and response to treatment

Comparisons Breastmilk culture results and response to treatment in infected women only.

Study Length Until resolution of symptoms

Outcomes Frequencies

Effect 7 cases of staph aureus. In three cases the organism resistant to penicillin. All patients were treated with antibiotics and all had resolution of symptoms within 36-48 hours.

Funding Unknown

Conclusions This study is poorly reported and indicates that the technique of milk collection did not rule out contamination from skin flora. The researchers in this study conclude that since the infection appears to be a subcutaneous cellulites breast milk cultures may not reflect the presence of bacteria and may not be helpful in guiding therapy. There were no controls in this study. All women received treatment. No abcesses developed and no ill effects were observed in infants all of whom continued to breastfeed.

Quality

RID: 1502 **Reference number** 4196

Thomsen AC;Espersen T;Maigaard S;

Course and treatment of milk stasis, noninfectious inflammation of the breast, and infectious mastitis in nursing women

1984 149 5 American Journal Obstetrics & Gynecology **pgs** 492 495

Study Type: Randomised Controlled Trial

Patient Characteristics All pp breastfeeding women with symptoms of inflammation of the breast

Intervention Women with stasis, noninfectious inflammation and infectious mastitis were classified by leukocyte count and bacterial count and then treatment methods evaluated

Comparisons No treatment, emptying of the breast and antibiotic treatment were compared

Study Length A week course of treatment

Outcomes Student's t test

Effect Regular emptying of the breast significantly shortened the duration of the symptoms of inflammation if there was no infection ($p<0.001$)and resulted in a good outcome in 96% of cases compared with 21% of untreated group ($P<0.001$). In the presence of infection antibiotic therapy and emptying of breast was significally better ($p<0.001$) than compared to no treatment or emmptying of breast alone. 96% of women with combined treatment improved. With breast emptying alone, only 51% of women improved.

Funding Unknown

Conclusions For women with infective mastitis, antibiotic treatment is indicated. Emptying the breast is important in cases of inflammation of the breast.

Quality - Colony counts were done in all cases and were likely to be accurate. Within groups women were randomised to treatment but method of randomisation, blinding and allocation concealment were not described.

Grading: *4 Expert opinion, formal consensus*

RID: 1187 **Reference number** 369

Fitz DR;

All tied up. Tongue tie and its implications for breastfeeding

2003 6 1 Practising Midwife **pgs** 20 22

Study Type: Qualitative

Patient Characteristics Infant with severe tongue-tie

Intervention Frenulotomy

Comparisons Feeding behaviours before and after surgery

Study Length 1 year

Outcomes Breastfeeding

Effect Not measured statistically

Funding Unknown

Conclusions This is a case study of one infant with tongue-tie and the results of frenulotomy and effect on feeding. The baby successfully fed for one year after surgery. Concludes that for those infants with problems feeding due to tongue-tie surgical referral should be considered

Quality

Grading: *1++* *High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 1510 **Reference number** 2873

Fairbank L;O'Meara S;Renfrew MJ;Woolridge M;Sowden AJ;

A systematic review to evaluate the effectiveness of interventions to promote the initation of breastfeeding

2000 4 25 Health Technology Assessment **pgs**

Study Type: Systematic Review

Patient Characteristics Breastfeeding women

Intervention Initiation and duration of breastfeeding

Comparisons NA

Study Length NA

Outcomes No summary statistics. Outcomes for individual studies presented by topic area

Effect See previous comments

Funding NHS

Conclusions

Quality

RID: 1512 **Reference number** 4211

Renfrew MJ;Wallace L;D'Souza L;Spiby H;Dyson L;

Effectiveness of public health interventions to promote the duration of breastfeeding: systematic reviews of the evidence: report to the Health Development Agency

2004 Health Development Agency **pgs**

Study Type: Systematic Review

Patient Characteristics Breastfeeding women

Intervention Duration of breastfeeding

Comparisons NA

Study Length NA

Outcomes No summary statistics. Outcomes for individual studies presented by topic area

Effect See previous comments

Funding HDA

Conclusions As yet unpublished report to HDA

Quality

RID: 1370 **Reference number** 2951

Sikorski J;Renfrew MJ;Pindoria S;Wade A;

Support for breastfeeding mothers

2004 Issue 2 The Cochrane Library **pgs**

Study Type: Systematic Review

Patient Characteristics Mother-infant pairs

Intervention Breastfeeding promotiion

Comparisons NA

Study Length NA

Outcomes Duration of breastfeeding for 6 months; Meta-analysis

Effect There was a beneficial effect on the duration of any breastfeeding in the meta-analysis of all forms of extra support (RR for stopping any breastfeeding before six months 0.88, CI 0.81-0.95). Extra professional support appeared beneficial for any breastfeeding (RR0.89, CI 0.81-0.97) but did not reach statistical significance for exclusive breastfeeding (RR 0.90, CI 0.81-0=1.01). The effect of lay support was the opposite. Peer support was effective in reducing the cessation of exclusive breastfeeding (RR 0.66, CI 0.49-0.89) but its effect on any breastfeeding did not reach statistical significance (RR 0.69-1.02).

Funding Cochrane

Conclusions See effect size.

Quality

Grading: *1+* *Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 1467 **Reference number** 4149

Pittard WB;Geddes KM;Brown S;Mintz S;Hulsey TC;

Bacterial contamination of human milk: container type and method of expression

1991 8 1 American Journal of Perinatology **pgs** 25 27

Study Type: Randomised Controlled Trial

Patient Characteristics Postpartum, breastfeeding women

Intervention Measurement of bacterial contamination of expressed breastmilk

Comparisons Method of expression of breastmilk and clean versus sterile containters

Study Length Bacterial growth in lab

Outcomes CFU

Effect No significant difference in CFUs/ml between clean versus sterile containers and between manual versus pump collection methods

Funding Unknown

Conclusions This is a small study and power calculations are not provided. However it is based on laboratory collection and analysis techniques which give strength to the findings.

Quality

Grading: *2-* *Case–control or cohort studies with a high risk of confounding bias, or chance and a significant*

RID: 1468 **Reference number** 4150

Pugh LC;

The breastfeeding support team for low-income, predominantly-minority women: a pilot intervention study

2001 22 5 Health Care Women Int **pgs** 501 515

Study Type: Case-Control

Patient Characteristics Breastfeeding women matched on type of delivery, previous breastfeeding experience and race.

Intervention Intensive intervention of 3 nurse visit and peer counsellor phone calls and visits twice a week

Comparisons Intensive intervention compared to routine care

Study Length 5 months

Outcomes Frequency percents

Effect No statistical calculations done

Funding Unknown

Conclusions The study raises the issue of intensive followup for minority and low income women.

Quality

Grading: *3 Non-analytic studies (for example, case reports, case series)*

RID: 1209 **Reference number** 521

England R;Doughty K;Genc S;

Working with refugees: health education and communication issues in a child health clinic.

2003 62 4 Health Education Journal **pgs** 359 368

Study Type: Qualitative

Patient Characteristics Turkish and Kurdish mothers

Intervention Focus groups

Comparisons NA

Study Length NA

Outcomes NA

Effect NA

Funding City and East London Education Consortium

Conclusions Aims were to identify the mother's concerns about their children's health in relation to infant feeding and basic nutrition and to obtain information About mothers' attitudes towards health. All Turkish and Kurdish women attending the surgery during a two week period were approached. 24 women attended the groups. Women in the groups had generally breastfed successfully but still often felt worried, particularly about insufficient milk. This study showed that even where health advocates are used, access is good and there is a wide range of health education materials in appropriate language available, misunderstandings and preconceptions still exist. Communication in this context is more than translation.

Quality

RID: 1137 **Reference number** 238

Morse JM;Jehle C;Gamble D;

Initiating breastfeeding: a world survey of the timing of postpartum breastfeeding

1990 27 3 International Journal of Nursing Studies **pgs** 303 313

Study Type: Qualitative

Patient Characteristics 120 countries

Intervention Timing of pp breastfeeding

Comparisons International comparison of feeding of colostrum

Study Length NA

Outcomes Frequency percents

Effect 50 of 120 cultures delay implementation of breastfeeding for more than two days

Funding Unknown

Conclusions This is not a systematic review but searches the “Human Relations Area Files” which are a compendium of cross cultural data. Women who do not wish to feed colostrums should not be presumed to be refusing to breastfeed. Acceptable prelactal feeds should be given to the baby.

Quality

Grading: *4 Expert opinion, formal consensus*

RID: 1508 **Reference number**

Singapore Ministry of Health;
Management of breastfeeding for healthy full-term infants.

2002 Singapore Ministry of Health **pgs**

Study Type: Guideline

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions

Quality

83 Bottle feeding What information to the woman and her partner is more likely to enable women to bottlefeed? Should a breastfeeding mother be shown how to prepare a bottle?
And if so in what context?

Grading: *2++ High-quality systematic reviews of case–control or cohort studies High-quality case–control or*

RID: 1479 **Reference number** 4179

Sigman-Grant M;Bush G;Anantheswaran R;
Microwave heating of infant formula: a dilemma resolved

1992 90 3 Pediatrics **pgs** 412 415

Study Type: Quasi-experimental

Patient Characteristics NA

Intervention This study measured infant formula in a variety of nursing bottles.

Comparisons Temperatures at various levels of milk after heating bottle in microwave. Also riboflavin and vit C levels measured.

Study Length NA

Outcomes Temperature and vitamin levels

Effect Topmost temperatures were significantly hotter than temperatures reached at other sites. There was no significant loss of either riboflavin or vitamin C.

Funding Unknown

Conclusions Bottles should be inverted 10 times after heating in microwave and heating timnes should be limited.

Quality

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 1071 **Reference number** 22

Sievers E;Oldigs HD;Santer R;Schaub J;

Feeding patterns in breast-fed and formula-fed infants

2002 46 6 Annals of Nutrition & Metabolism **pgs** 243 248

Study Type: Cohort

Patient Characteristics Newborns

Intervention Amount of feeding and sleep patterns

Comparisons Breastfed and bottle fed babies

Study Length 17 weeks

Outcomes Feeding volumes g/kg

Effect A day night asymmetry of feeding first evident at 6 weeks became gradually more pronounced in both groups. There was a continuous increase in the median feeding volume in the bottle fed group. From six weeks on formula fed infants had significantly higher feeding volumes.

Funding Milupa, Friedrichsdorf, Germany

Conclusions May indicate overfeeding in bottle fed babies

Quality

Grading: *3* *Non-analytic studies (for example, case reports, case series)*

RID: 1458 **Reference number** 4139

Cairney P;Alder E;

A survey of information given by health professionals, about bottle feeding, to first-time mothers in a Scottish population.

2001 59 2 Health bulletin **pgs** 97 101

Study Type: Other Observational

Patient Characteristics Postpartum women feeding by any method

Intervention Extent of preparation for bottle feeding

Comparisons NA

Study Length 1 month

Outcomes Frequency percents and chi square

Effect Fewer than 50% of women reported being given information about sterilising equipment, making feeds and offering the right quantities before birth. Of women giving bottle feeds at one month only 57% reported that they had been given information postnatally about sterilisation of equipment, making up feeds and how much feed to offer.

Funding Unknown

Conclusions The study highlights need for education about proper bottle feeding techniques.

Quality

Survey

RID: 1162 **Reference number** 73

Fein SB;Falci CD;

Infant formula preparation, handling, and related practices in the United States

1999 99 10 Journal of the American Dietetic Association **pgs** 1234 1240

Study Type: Other Observational

Patient Characteristics Postpartum women feeding by any method

Intervention Infant formula prepartion

Comparisons NA

Study Length 5 months

Outcomes Freqency percents

Effect From one third to more than 60% of mothers did not follow recommendations that formula should not be mixed with warm tap water; that bottles, nipples and tap water used to reconstitute formula should be sterilised or that bottles should not be heated in a microwave oven. Thirty-five percent of mothers added other food to bottles of formula of 2 and 5 month old infants. Baby cereal was the most common substance used.

Funding Unknown

Conclusions The study highlights need for education about proper bottle feeding techniques.

Quality

Survey

RID: 1477 **Reference number** 4177

Jacob F;

Infant care: getting it right... reducing the potential dangers of bottle feeding

1985 Dec Community outlook **pgs** 20 21

Study Type: Other Observational

Patient Characteristics Bottlefeeding mothers

Intervention Formula preparation and sterilisation

Comparisons NA

Study Length Cross sectional study

Outcomes Frequency percents and chi square

Effect 37% of mothers were not preparing feeds according to manufacturer's directions. 53.3% were not sterilising bottles and teats correctly. There was a statistically significant association between how a mother prepared a feed and how she sterilised ($p<0.05$). 91% of those who did not prepare feeds according to manufacturers' instructions and 81% of those who did not sterilise correctly were from social classes four and five. Only 43.75% of multips were following instructions for feeding preparation. 71% of primips had instruction in bottle feeding preparation but only 25% of multips had instructions.

Funding Unknown

Conclusions The study highlights need for education about proper bottle feeding techniques.

Quality

Survey

Grading: ***4 Expert opinion, formal consensus***

RID: 537 **Reference number** 4148

National Association of Neonatal Nurses;
Early discharge of the term newborn

1999 National Association of Neonatal Nurses **pgs**

Study Type: Guideline
Patient Characteristics Term newborns
Intervention NA
Comparisons NA
Study Length NA
Outcomes NA
Effect NA
Funding NANN
Conclusions Guideline based on insufficient review of literature and pre-existing guidelines
Quality

1.4 Chapter: 7 MAINTAINING INFANT HEALTH

131 Are there interventions that improve parenting skills and/or secure attachment & bonding

Grading: ***1++ High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias***

RID: 557 **Reference number** 4658

Barlow J;Parsons J;
Group-based parent-training programmes for improving emotional and behavioural adjustment in 0-3 year old children

2003 Parso ns J. John Wiley & Sons **pgs**

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Cochrane Collaboration
Conclusions This study aimed to evaluate group based jparenting programmes. Five studies were included in a meta analysis. Parent reports showed a non significant result favouring intervention and independent observations of children's behaviour showed a significant result favouring the

intervention group (ES-0.54, CI -0.84--0.23).

Quality ++

RID: 553 **Reference number** 4665

Coren E;Barlow J;

Individual and group-based parenting programmes for improving psychosocial outcomes for teenage parents and their children

2001 Barlow J. John Wiley & Sons **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions This review is based on the data from four small studies (279 women total). These showed that both infividual and group based parenting programmes favored the intervention group on a range of maternal and infant measures.

Quality ++

RID: 548 **Reference number** 1460

Kendrick D;Elkan R;Hewitt M;Dewey M;Blair M;Robinson J;Williams D;Brummell K;

Does home visiting improve parenting and the quality of the home environment? A systematic review and meta analysis

2000 82: (6) Arch Dis Child **pgs** 443 451

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding HTA

Conclusions Home visiting programmeswere associated with an improvement in the quality of the home enviornment as measured by the HOME score , p<0.001. Fewstudies used UK health visitors so caution must be exercised in extrapolating the results to the UK.

Quality ++

RID: 604 **Reference number** 4688

Wade K;Cava M;Douglas C;Feldman L;Irving H;O;apos;Brien MA;Sims JN;Thomas H;

A systematic review of the effectiveness of peer/paraprofessional 1:1 interventions targeted towards mothers (parents) of 0-6 year old children in promoting positive maternal (parental) and/or child health/developmental

outcomes (Structured abstract) **pgs**

1999 Ontario Ministry of Health, Region of Hamilton-Wentworth, Social and Public Health Services Division.

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Public Health Research Education and Development Program, Canada

Conclusions Most of the studies were US based and most targeted poor/low income mothers/families. Overall there was some positive evidence to support the effectivenessof peer/paraprofessional 1:1 interventions in promoting child development and positive parent child interaction. Almost all of the methodologically sound studies targetted high risk populations.

Quality ++

Grading: *1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 573 **Reference number** 974

Anisfeld E;Casper V;Nozyce M;Cunningham N;

Does infant carrying promote attachment? An experimental study of the effects of increased physical contact on the development of attachment

1990 61: (5) Child Development **pgs** 1617 1627

Study Type: Randomised Controlled Trial

Patient Characteristic Women were similar in all demographic characteristics except parity and ethnicity. The control group had more primips and mor Black mothers.

Intervention Use of soft infant carrier versus plastic infant seats.

Comparisons security of attachment; maternal responsivity and sensitivity.

Study Length 13 months

Outcomes Chi square t test calculations were made

Effect There were significantly more securely attached infants in the experimental group than in the control group, p=.019. A comparison of high and moderate/low users showed that 15/16 high users had infants who were securely attached and of the seven moderate/low users four were securely attached (NS result).

Funding Snugli Cottge Industries, Ross Labs and several private donors.

Conclusions In this study, close physical contact between mother and infant appears to promote secure attachment.

Quality + Small study; no allocation concealment;subjectivity in maternal responses and observers assessments

RID: 587 **Reference number** 4666

Coren E;Barlow J;Stewart-Brown S;

The effectiveness of individual and group-based parenting programmes in improving outcomes for teenage

mothers and their children: a systematic review.

2003 26: (1) Journal of Adolescence **pgs** 79 103

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions The findgins of the review are based on 14 studies that used varying study designs and are therefore limited. The results suggest that parenting programmes can be effective in imporving a range of psychosoial and developmental outcomes for teenage mothers and their children.

Quality + This review included one group study designs

RID: 847 **Reference number** 379

Goodman JH;

Becoming an involved father of an infant

2005 34 2 JOGNN - Journal of Obstetric, Gynecologic, & Neonatal Nursing **pgs** 190 200

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding National Institute of Nursing Research

Conclusions Fathers of infants experienced four phases: 1. entering with expectations and intentions 2. confronting reality 3. creating one's role of involved father and 4. reaping rewards. A crucial step in becoming closer to his child was a father's development of skills needed to care for the infant. Feeling excluded from providing care to the infant was perceived as inhibiting the development of the father infant relationship. This was particularly true among fathers of breastfed babies.

Quality + This was a metasynthesis of qualitative work and is thus inherently subjective. However,after careful reading a list of metaphors (themes, concepts or phrases) in each report was developed and these were compared and common findings were identified.

RID: 572 **Reference number** 944

Jacobson SW;Frye KF;

Effect of maternal social support on attachment: experimental evidence

1991 62: (3) Child Development **pgs** 572 582

Study Type: Randomised Controlled Trial

Patient Characteristics First time mothers at least 17 years old participating in WIC in the US.

Intervention Women were assigned a volunteer coach or usual care

Comparisons A neonatal assessment, a 13 and 14 month assessment was made. An initial Brazelton Assessment was done and then HOME assessment. Complexity of play was assessed and attachment ratings scores were calculated.

Study Length 14 months

Outcomes Attachment ratings scores and criterion sort scores. T tests and pvalues are calculated

Effect Attachment ratings was significant or experimental group, p<0.005.

Funding Young Scholar's Award

Conclusions This study may provide evidence that maternal social support aids development of secure attachment

Quality + Small study with subjective outcome measures

RID: 551 **Reference number** 861

Johnson Z;Howell F;Molloy B;

Community mothers' programme: randomised controlled trial of non-professional intervention in parenting

1993 306: 6890 Brit Med J **pgs** 1449 1452

Study Type: Randomised Controlled Trial

Patient Characteristics The women were primiparous and lived in a defined deprived area in Dublin

Intervention A community mothers programme using trained volunteer mothers plus standard care v. standard care alone

Comparisons Mother's self esteenm on child's first birthday; hospital admissions; diet and developmental milestones.

Study Length 1 year

Outcomes RR and p values

Effect There was NS difference in hospital admissions. For inclusion of all food groups in daily diet the intervention group performed significantly better than controls (p<0.01). By maternal report, with the exception of motor games the differences between the two groups on developmental tasks was highly significant (p<0.01).

Funding Bernard van Leer Foundation, The Hague

Conclusions Non professionals can deliver a health promotion programme on child development effectively. Whether they can do so as effectively as professionals requires further study.

Quality + Data on self esteem, diet and child's cognitive activities collected by maternal

RID: 602 **Reference number** 4686

Turley MA;

A meta-analysis of informing mothers concerning the sensory and perceptual capabilities of their infants: the effects on maternal-infant interaction

1985 14: (3) Maternal Child Nursing Journal **pgs** 183 197

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions The major conclusion was that providing information to mothers concerning their infant's social capabilities significantly increased the overall effect size by 81% in terms of maternal-infant interaction. The effect of location where the information was provided on maternal infant interaction was significant p=.009. The t test differences showed that the home as a setting for providing information was significantly different from the hospital setting. The results should be viewed with caution as the source of information was largely unpublished studies.

Quality + This is an old meta analysis which used 20 experimentally controlled studies, 16 of which were dissertations or master's theses

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 544 **Reference number** 884

Andresen PA;Telleen SL;

The relationship between social support and maternal behaviors and attitudes: a meta-analytic review

1992 20: (6) American Journal of Community Psychology **pgs** 753 774

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions This review found significant correlations between both emotional (supportive actions that conveyed empathy, caring,love, and trust) and material support (physical resources needed to cope with the demands of parenting) and maternal behaviours (p<.05). Maternal behaviours included responses to child's physical and emotional needs, verbal interactions with the child, infant stimulation or play interactions. The results of this analysis must be usedcautiously because of methodological issues sited above.

Quality - Non RCT's included; heterogeneity of outcome measures makes combining data problematic; studies predominately white middle class women; half of the studies were unpublished dissertations

RID: 545 **Reference number** 4656

Armstrong KL;Fraser JA;Dadds MR;Morris J;

Promoting secure attachment, maternal mood and child health in a vulnerable population: a randomized controlled trial.

2000 36: (6) Journal of Paediatrics & Child Health **pgs** 555 562

Study Type: Randomised Controlled Trial

Patient Characteristics Inner city families rated to be at resk due to history of violence or demographic risk factors

Intervention A structured program of child health nurse visits was offered

Comparisons Home visits were compared to normal care

Study Length 4 months

Outcomes T tests and ANOVA used

Effect The HOME test showed p<0.05 for each subscale.

Funding Community Child Health Service, Royal Children's Hospital and Health Service District , National Health and Medical Research Coucil of Australia, the Abused Child Trust of Queensland, Creswick Foundation of Victoria and Rotary International

Conclusions Eary home based intervation targeted to vulnerable families may promote an environment conducive for infant mental and general health. This study may not be universally generalisable However.

Quality - It is unclear if the investigator was blind at the 4 motnth visit; no allocation concealment; almost 10% droput rate

RID: 581 **Reference number** 4619

Bakermans-Kranenburg MJ;Van Ijzendoorn MH;Juffer F;

Less is more: meta-analyses of sensitivity and attachment interventions in early childhood

2003 129: (2) Psychol Bull **pgs** 195 215

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Center for Child and Family Studies, the Netherlands

Conclusions A core set of 51 randomized control group studies was established from the total of 81 studies reviewed. In this set of studies interventions appeared to be significantly effective in enhancing maternal sensitivity, p<0.00. Unexpectedly the four studies that did not use personal contact as a means of intervening showed the largest effect - use of soft baby carriers, kangaroo method, a workbook and a video (p<.05).

Heterogeneity of outcome measures and transformation of sttistics and use of dissertation abstracts should call for cautious interpretation.

Quality - Non RCTs included and statistics were recomputed and transformed into Cohen's d. Dissertation abstracts used.

RID: 564 **Reference number** 348

Clemmens D;

The relationship between social support and adolescent mothers' interactions with their infants: a meta-analysis

2001 30: (4) JOGNN - Journal of Obstetric, Gynecologic, & Neonatal Nursing **pgs** 410 420

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions The review concludes that there is a significant relationship between social support of adolescent mothers and their interactions with their infants, r=.60 (CI .239-.379). However, they ave used a meta analysis to evaluate non RCTs and the results should be viewed with caution.

Quality - This meta analysis included cross secional studies and used a varies of outcome measures

Grading: *4 Expert opinion, formal consensus*

RID: 1003 **Reference number** 4988

Bolzan N;Gale F;Dudley M;

Time to father

2004 39 1-2 Social Work in Health Care **pgs** 67 2

Study Type: Qualitative

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions This is a qualitative study which explores men's postnatal mental health. Themes identified include a desire to be more involved in the direct care and nuturing of their babies than their fathers were. Fathers having least flexibility and autonomy in their work reported experiencing more unhappiness, anxiety and higher levels of stress.

Quality

121 Infant - Do particular interventions/observations prevent health problems in the PN period?

Grading: *1++ High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 169 **Reference number** 293

Garner P;Panpanich R;Logan S;

Is routine growth monitoring effective? A systematic review of trials. [Review] [16 refs]

2000 82: (3) Arch Dis Child **pgs** 197 201

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions This is a report of work done in the authors' Cohcrane review to evaluate the impact of growth monitoring on either the child in relation to preventing death, illness or malnutirion or the

mother in relation to nutritionalknowledge, anxiety or reassurance about the child's health and satisfaction with services.
Only two studes met inclusion criteria. Both were conducted in developing countries. In one study the nutritional status at 30 months in 500 children showed no difference between those allocated to growth monitoring and those not. In the other counselling improved mothers' knowledge of the growth chart at 4 months.The authors express surprise that there was so little research evaluating the potential benefits and harms of growth monitoring. They conclude that there is insuffiient reliable information to be confident about whether routine growth monitoring is of benefit to child health.

Quality ++

Grading: *1+ Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 134 **Reference number** 1616

The use of growth charts for assessing and monitoring growth in Canadian infants and children

2004 (1) Canadian Journal of Dietetic Practice and Research **pgs** 22 26

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Dietitians of Canada; Canadian Paediatric Society; College of Family Physicians of Canada and Community Health Nurses Association of Canada

Conclusions Recommendations regarding growth monitoring based on the best available evidence. Most recommendations made on consensus basis as evidence is not strong. Recommendations state that serial measurements of recumbent length, weight and head circumference should be part of scheduled well baby visits a 1-2 weeks of age, 1, 2, 4, 6, 9, 12, 18, 24 months and 4 and 6 years. CDC growth charts were recommended and health care providers were cautioned that breastfed babies grow differently from fromula fed infants during the first year of life. Breastfed infants tend to become leaner after 3-4 months of life.

Quality + Evidence tables are not provided for each of the several subtopics addressed. Most recommendations are based on insufficient evidence or "fair" evidence.

RID: 158 **Reference number** 4289

Craig J;Lancaster GA;Taylor S;Williamson PR;Smyth RL;

Infrared ear thermometry compared with rectal thermometry in children: a systematic review

2002 360: 9333 Lancet **pgs** 603 609

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length
Outcomes
Effect
Funding Royal Liverpool Children's NHS Trust
Conclusions The implications of this review are that measurements taken with infrared ear thermometry cannot be used as an approximation of rectal temperature, even when the device is used in rectal mode (p<0.0001)
Quality + Study type not identified

RID: 159 **Reference number** 1906
Craig JV;Lancaster GA;Williamson PR;Smyth RL;
Temperature measured at the axilla compared with rectum in children and young people: systematic review
2000 320: 7243 Brit Med J **pgs** 1174 1178
Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Royal Liverpool Children's NHS Trust
Conclusions Electronic thermometers were used in only two studies of neonates. One showed narrow limits of agreement. The other, with wide limits of agreement was the only study published before the 1980's and a difference device was used. The overall conclusion was that the difference between temperature readings at the axilla and rectum using electronic thermometers showed wide variation across studies.
Quality + Comparative studies of ?varying study designs

RID: 235 **Reference number** 4189
NHS Quality Improvement Scotland;
Routine examination of the newborn
2004 **pgs** 33
Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding NHS
Conclusions This is a best practice statement based upon a review of all available evidence using a quality appraisal of the evidence. This document describes competencies and the basic procedures of the newborn exam.
Quality + Inquiries made to obtain quality Assessment methods and evidence tables

Grading: ***2+*** ***Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance***

RID: 193 **Reference number** 1355

Loveys AA;Dutko-Fioravanti I;Eberly SW;Powell KR;

Comparison of ear to rectal temperature measurements in infants and toddlers

1999 38: (8) Clin Pediatr (Phila) **pgs** 463 466

Study Type: Cohort

Patient Characteristics Hospitalized children (0-2) years, Rochester, NY

Intervention This is a comparative study evaluating paired rectal and ear temperature measurements

Comparisons 1175 pairs of temperatures were obtained from 140 children

Study Length Throughout hospitalization

Outcomes Mean temperatures and correlation coefficients

Effect The mean rectal temp was 37.58 C and the mean ear temp was 37.60 C . However at the low end of the the rectal temp scale, ear temps tended to be higher and and at the high end of the rectal temp scal, ear tems tended to be lower.

Funding

Conclusions

Quality + 1175 pairs of rectal and ear measurements taken. Blinding not possible. Adequate sample size

RID: 290 **Reference number** 4220

Sganga,A.; Wallace,R.; Kiehl,E.; Irving,T.; Witter,L.

A comparison of four methods of normal newborn temperature measurement

2000 25: (2) American Journal of Maternal Child Nursing **pgs** 76 79

Study Type: Cohort

Patient Characteristics Normal newborns between 1-168 hours of age.

Intervention Comparison between difference methods for measuring temperature

Comparisons Measurements between glass mercury, tympanic thermometer, electronic thermometer and digital disposable thermometer.

Study Length One day

Outcomes Pearson's r correlation coefficient

Effect Pearson's Correlation Coefficients: Glass mercury thermomether 1.000; digital 0.84; electronic 0.74; and tympanic 0.35.

Funding Unknown

Conclusions The temperature measurements obtained with the digital thermometer correlated most closely to glass and tympanic measurement correlated poorly.

Quality + No inter/intra-rater reliability assessed. Nurses were not blinded to previous recordings.

RID: 209 **Reference number** 4297

Takayama JI;Teng W;Uyemoto J;Newman TB;Pantell RH;

Body temperature of newborns: what is normal?

2000 39: (9) Clin Pediatr (Phila) **pgs** 503 510

Study Type: Cohort

Patient Full term healthy newborns

Characteristics

Intervention Mean birth temperature and mean temperature 2-3 hours after birth.

Comparisons Birth temperatures and average temperature increases.

Study Length 20 hours post birth

Outcomes Means compared using paired t test and ANOVA

Effect Mean birth temperature measured 36.5 C. Temperature was associated with birth weight ($p<0.0005$) and the presence of maternal fever ($p<0.0001$).Mean temp. increased with age by .2 C by 2-3 hrs. after birth and .3C by 15-20 hrs.

Funding Unknown

Conclusions Although 17% of all temperatures measureddwere in the hypothermic (<36.3 C) range, the only response recorded by nursery staff consisted of warming by modifying the environment, i.e. bundling. No infants had systemic infections and all were discharged in stable condition.

Quality + Chart review: missing data & disparate timing

125 Vitamin K - By what route should Vitamin K be administered

Grading: ***1++*** ***High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias***

RID: 228 **Reference number** 4244

Puckett RM;Offringa M;

Prophylactic vitamin K for vitamin K deficiency bleeding in neonates

2004 Issue 3 The Cochrane Library **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions This review verifies that either IM or ral vitamin K prophylaxis (I mg) improved biochemical indices of coagulation at 1-7 days. A single oral compared with a single IM dose resulted in lower plasma vitamin K levels at two weeks and one month, whereas a 3 dose oral schedule resulted in higher plasma vitamin K levels at two weeks and at two months than did a single intramuscular dose. Neither IM or oral vitk K has been tested in RCTS with the outcome of late

Quality ++

Grading: ***1+*** ***Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias***

RID: 278 **Reference number** 4437

Roman, E. Fear, N.T. Ansell, P. Bull, D. Draper, G. McKinney, P. Michaelis, J. Passmore, S.J. von Kries, R.
Vitamin K and childhood cancer: analysis of individual patient data from six case=control studies

2002 86: British Journal of cancer **pgs** 63 69

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions There was a broad range of diagnostic groups and poor quality of some of the vitamin K data. Therefore the analysis was conducted in two different ways. In the first analysis it was assumed that where no written record of vit K was found it had not been given. In the second analysis hospital policy and perinatal morbidity was used to 'impute' whether or not vit. K had been given. In the first analysis the OR for leukaemia was 1.09 (CI 0.92-1.28) and 1.05 (CI 0.92-1.20) for other cancers. In the second analysis the adusted OR increased to 1.21 (CI 1.02-1.44) and 1.10 (CI 0.95-1.26) respectively. But when the data from Goldings study were excluded the adjusted OR for leukaemia became 1.06(0.89-1.25) and 1.16 (0.97-1.39). This analysis provides no convincing evidence that intramuscular vitamin K is associated with childhood

Quality + Heterogeneity among studies may have affected outcomes in either direction

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 226 **Reference number** 4438

Croucher C;Azzopardi D;
Compliance with recommendations for giving vitamin K to newborn infants

1994 308: 6933 Brit Med J **pgs** 894 895

Study Type: Cohort

Patient Characteristics Mothers who delivered live infants at Queen Charlotte's and Chelsea Hospital during June

Intervention Compliance with vit K administration after discharge from hospital

Comparisons Levels of compliance

Study Length 6 weeks postpartum

Outcomes Frequency percents are calculated

Effect Number of women breastfeeding and number of infants who received vitamin K orally:

Time	Breastfeeding	Vit K given
At discharge	162	161 (99%)
At 7 days	162	143 (88%)
At 6 weeks	145	57 (39%)

Funding Unknown

Conclusions This study addresses the potential problem of patient compliance with outpatient regimes of vitamin K.

This is a survey and impossible to minimise the potential bias of patient reporting on expected health behaviours.

Quality + If anything, patients usually over report compliance with expected health behaviours. So it is possible that compliance was even less than the reported 39%

RID: 227 **Reference number** 4436

Fear NT;Roman E;Ansell P;Simpson J;Day N;Eden OB;

Vitamin K and childhood cancer: a report from the United Kingdom Childhood Cancer Study

2003 89: (7) Br J Cancer **pgs** 1228 1231

Study Type: Case-Control

Patient Characteristics Children aged 3 months-14 years diagnosed with pathologically confirmed malignancy between 1992 and 1996 were eligible for inclusion. For each case, two controls matched on sex, month and year of birth and region of residence at diagnosis were randomly selected and recruited from population registers held by the former Family Health Service Authorities.

Intervention The relationship between IM vitamin K and the development of leukaemia or other cancers

Comparisons Rates of cancer and leukaemia and vitamin K status between cases and controls

Study Length 3 months to 14 years

Outcomes The outcome was pathologically diagnosed cancer

Effect There was no evidence of an association between IM vitamin K and childhood cancer in general (OR 1.06, CI 0.88-1.29) or leukaemia in particular(OR 1.16, CI 0.88-1.42).

Funding Department of Health; Leukaemia Research Fund

Conclusions Yes, this study adds weight to the argument that there is no evidence of an association between IM vitamin K and childhood cancer in general or leukaemia in particular.

Quality + This was a large case control study and was matched on major potential confounders including age, sex and region of residence at time of diagnosis

RID: 252 **Reference number** 4365

Wariyar U;Hilton S;Pagan J;Tin W;Hey E;

Six years' experience of prophylactic oral vitamin K

2000 82: (1) Arch Dis Child **pgs** F64 F68

Study Type: Cohort

Patient Characteristics All newborns born in the north of England between 1993-1998

Intervention Use of oral Vit. K as a prophylaxis for VKDB

Comparisons VKDB and compliance with outpatient medication doses

Study Length 3 months

Outcomes Incidence of VKDB

Effect

Funding Orakay

Conclusions No infants in the study had an early VKDB. 4 /182,000 infants had a late VKDB. Two of these infants had an alpha 1 antitrypsin deficiency. The other two did not receive medication or instructions for prophylaxis from hospital staff. There was a 98% compliance rate for three doses of Vit. K and 93% of babies had all four doses.

Yes, oral Vit. K appears to be effective but is not yet available in the UK due to unsettled legal issues.

Quality + This is a large cohort study and close follow up of VKDB. It is likely that the effect is real.

Grading: ***2-*** ***Case–control or cohort studies with a high risk of confounding bias, or chance and a significant***

RID: 458 **Reference number** 4418

The use of vitamin K in the perinatal period. Fetus and Newborn Committee, Canadian Paediatric Society.[see comment]. [Review] [37 refs]

1988 139 2 CMAJ Canadian Medical Association Journal **pgs** 127 130

Study Type: Case-Control

Patient Characteristics: Cases and controls were matched on age and sex of child, age and occupation ofparents, ethnic group, number of siblings, social class and type of accommodation. The main difference was active abuse or neglect.

Intervention: Screening characteristics for child abuse

Comparisons: This was an evaluation of a tool used to screen for child abuse. The sensitivity and specificity were studied in abusing and 'non abusing' families.

Study Length: Cross-sectional study

Outcomes: Frequency percents

Effect: The screening was sensitive to 82% of abusing families (86% if form was fully completed with relative weighting for each risk factor)and specified 88% of control families as non abusing. Thus 18% of abusing families were missed and 12% of non abusing families were identified as

Funding: Unknown

Conclusions: This study raises questions about the use of screening tools for risk assessment of child abuse.

Quality - It is difficult to know if the controls were actually precluded from being cases in this study.

91 Diarrhoea (Infant)How should it be identified and managed?
When should women be asked about health problems in their babies?

Grading: ***1++*** ***High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias***

RID: 232 **Reference number** 4318

Armon K;Atkinson M;Lakhanpaul M;Hemmingway P;McFaul R;Smith S;Werneke U;Williams L;Stephenson T; Guideline for the management of children presenting to hospital with diarrhoea, with or without vomiting

2002 **pgs**

Study Type: Systematic Review

Patient Characteristics:

Intervention:

Comparisons:

Study Length:

Outcomes:

Effect:

Funding: Children Natiionwide Medical Research Fund

Conclusions: Although this review is aimed at hospital management of children with diarrhoea it contains criteria for assessing dehydration, oral rehydration guidance for mild to moderate dehydration

and refeeding recommendations.

Quality ++

RID: 87 **Reference number** 71

Van Niel CW;Feudtner C;Garrison MM;Christakis DA;

Lactobacillus therapy for acute infectious diarrhea in children: A meta-analysis

2002 109: (4) Pediatrics **pgs** 678 684

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Robert Wood Johnson

Conclusions The meta analysis looked only at lactobacillus treatment of diarrhea. Five of 9 studies included infants. Summary point estimates indicate a reduction in diarrhea duration of .7 days and a reduction in diarrhea frequency of 1.6 stools on day 2 of treatment.

Quality ++

RID: 91 **Reference number** 48

Zupan J;Garner P;Omari AAA;

Topical umbilical cord care at birth

2004 Issue 3 The Cochrane Library **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane

Conclusions Addresses topical umbilical cord care at birth. Good trials in low income settings are warranted. In high income settings there is limited research which has not shown an advantage of antibiotics or antiseptics over simply keeping the cord clean. Quality of evidence is low.

Quality ++

Grading: *1+* *Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias*

RID: 10 **Reference number** 24

Association of Women's Health OaNNA;

Neonatal skin care. Evidence based practice guideline

2001 **pgs** 54

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Association of Women's Health, Obstetric and Neonatal Nurses
Conclusions One section of this review addresses diaper dermatitis and provides guidance for prevention and treatment of this condition.
Quality + Search was limited to medline and CINAHL

RID: 148 **Reference number** 4267
Bowring AR;Mackay D;Taylor FR;
The treatment of napkin dermatitis: a double-blind comparison of two steroid-antibiotic combinations
1984 3: (9) Pharmatherapeutica **pgs** 613 617
Study Type: Randomised Controlled Trial
Patient Characteristics Infants presenting to 4 general practitioners with treatable napkin dermatitis
Intervention Use of miconazole + hydrocortison or nystatin + hydrocortisone
Comparisons Cure rates between two preparations
Study Length 7 days
Outcomes Frequency percets and chi square
Effect NS difference in 7 day followup; 80% cure rate in miconazole group and 84% rate in nystatin group. However among 19 positive fungal cultures 2/8 nystatin remained positive (25%). None of miconazole remained positive.
Funding Unknown
Conclusions One of several studies which indicate inferiority of nystatin for treatment of napkin dermatitis.
Quality + Blinding of assessors not discussed

RID: 154 **Reference number** 600
Campbell RL;
Clinical tests with improved disposable diapers
1987 14: (Supp 1) Pediatrician **pgs** 34 38
Study Type: Randomised Controlled Trial
Patient Characteristics 1644 infants - no further description
Intervention Use of cloth diapers, conventional disposable diapers or absorbent gel diapers
Comparisons Double blind diaper rash grading; skin wetness measurements; skin pH measurements; parent perception
Study Length 16-18 weeks
Outcomes T test to compare variables with diaper type
Effect Absorbent gelling material disposable diapers were associated with significantly reduced skin wetness, closer to normal skin pH and lower degrees of diaper dermatitis when compared to conventional disposable or home-laundered cloth diapers ($p<0.05$).
Funding Proctor and Gamble
Conclusions It appears that absorbent gel material provides a better environment for infant's skin by

reducing skin wetness, and maintaining more normal pH and preventing the mixing of urine

Quality + Only partial blinding and allocation concealment.Parially subjective assessments of rash.

RID: 37 **Reference number** 66

Garrison MM;Christakis DA;

Systematic review of treatments for infant colic:Early childhood: colic, child development, and poisoning

2000 106: (1 Suppl) Pediatrics **pgs** 184 190

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Packard foundation

Conclusions This review is the basis for commendations regarding treatment for infant colic. Twenty two RCTs met the inclusion criteria but only 5 trials were considered to have adequatecasedefinitions and double blinding. These differences along with variation in outcome measures limited comparison of results between trials and so meta analysis was not done. Four of the interventions studied had data of adequate quality and statistically significant numbers needed to treat: ; hypoallergenic diet for breastfeeding mother (2 studies) or formula feeding infant (2 studies); soy formula (2 trials); reduced stimulation (1 trial); and herbal tea (1 trial). Studies with statistically significant results included dicyclomine, hypoallergenic diet, soy formula and decreased stimulation and herbal tea.

Quality + The literature was limited to medline and Cochrane

RID: 49 **Reference number** 69

Huang JS;Bousvaros A;Lee JW;Diaz A;Davidson EJ;

Efficacy of probiotic use in acute diarrhea in children: a meta-analysis

2002 47: (11) Digestive Diseases and Sciences **pgs** 2625 2634

Study Type: Metaananalysis

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding NIH

Conclusions This meta analysis of 18 studies included only 5 with infants. The study suggests that probiotics with standard rehydration therapy reduces the duration of acut diarrhea by .8 days. However a variety of probiotics were utilized including various lactobacilli, streptococcus thermophilus,

saccharomyces boulardii, bifidobacteria, enterococcus or combinations of these.

Quality + Significant heterogeneity

RID: 190 **Reference number** 541

Lane AT;Rehder PA;Helm K;

Evaluations of diapers containing absorbent gelling material with conventional disposable diapers in newborn

1990 144: (3) American Journal of Diseases of Children **pgs** 315 318

Study Type: Randomised Controlled Trial

Patient Characteristics Full term infants rndomised by sex and diet

Intervention Gel disposable diapers with conventional disposable diapers

Comparisons Degree of rash at 2, 6, 10 and 14 weeks of age

Study Length 14 weeks

Outcomes T test to compare diapers

Effect At 14 weeks infants in diapers containing gel material had significantly less diaper rash. Overall the incidence of rash was low.

Funding Proctor and Gamble

Conclusions Although the incidence of rash was low it appears that gel material results in less rash at 14 weeks of age.

Quality + Allocation concealment is not addressed. High drop out

RID: 64 **Reference number** 67

Lucassen PL;Assendelft WJ;Gubbels JW;van Eijk JT;van Geldrop WJ;Knuistingh NA;

Effectiveness of treatments for infantile colic: systematic review

1998 316: Brit Med J **pgs** 1563 1569

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Praeventie Fonds

Conclusions Elimination of cows' milk protein was effective when substituted by hypoallergenic formula milks (effect size 0.22, CI 0.09-0.34). The effectiveness of substitution by soy formula milks was unclear. Dicyclomine was effect but serious side effects have been reported. The advice to reduce stimulation was beneficial (effect size 0.48, CI 0.23-0.74) whereas the advice to increase carrying and holding seemed not to reduce crying. No benefit was shown for simethicone. Uncertainty remained about the effectiveness of low lactose formula milks.

Quality + Unclear as to rqndomisation in all trials

RID: 267 **Reference number** 4374

Maisels MJ;Vain N;Acquavita AM;de B;Cohen A;DiGregorio J;

The effect of breast-feeding frequency on serum bilirubin levels

1994 170: (3) American Journal of Obstetrics & Gynecology **pgs** 880 883

Study Type: Randomised Controlled Trial

Patient Characteristics Full term normal birthweight infants

Intervention Frequent feeding every 2 hours and demand feeding and effect on serum bilirubin levels

Comparisons Differences in serum bilirubin levels based on feeding frequency

Study Length 72 hours

Outcomes Frequency percents and fisher exact test

Effect Infants in the frequent group (n=131) nursed nine times per day and the demand group (n=143) fed 6.5 times per day. Serum bili was 7.4 mg/dl in the frequent group and 8.0 mg/dl in the demand group. There was no correlation demonstrated.

Funding Ross Labs

Conclusions Yes. There does not appear to be a significant effect on serum bili levels in the first 3 days after birth within the range of feeding frequency observed in this study.

Quality + Blinding of mothers and nurses not possible. Potential for maternal alteration in feeding patterns.

RID: 211 **Reference number** 798

Whitehouse HS;Bannan EA;Ryan NW;

Effect of hypochlorite bleaching on diaper bacteria and irritation

1967 113: (2) American Journal of Diseases of Children **pgs** 225 228

Study Type: Randomised Controlled Trial

Patient Characteristics Infants up to 10 months of age

Intervention Use of bleach vs. placebo for cleaning diapers

Comparisons Bacterial load and clinical rash in babies with and without bleached diapers

Study Length 8 weeks

Outcomes P values provided but statistical test not described

Effect Bacterial load less in bleached diapers, p<0.01. Babies had less irritation while wearing bleached diapers p,0.05.

Funding Unknown

Conclusions It appears that bleaching diapers lowers bacterial load and reduces skin irritation.

Quality + There may have been breach of allocation concealment due to odor of bleach.

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 289 **Reference number** 143

Amato,M.

Interruption of breast-feeding versus phototherapy as treatment of hyperbilirubinemia in full-term infants

1985 40: (2-3) Helv.Paedint.Acta **pgs** 127 131

Study Type: Randomised Controlled Trial

Patient Characteristics Full term healthy infants with hyperbilirubinemia.

Intervention Treatment with phototherapy vs. interruption of breastfeeding

Comparisons Serum bili levels and rebound

Study Length Approximately 50-51 hours of treatment and subsequent measurement for rebound elevation of serum bili.

Outcomes Bilirubin levels and students t test

Effect Interruption of breast feeding had the same effect as treatment with phototherapy (p>0.05).

Funding Unknown

Conclusions This study recommends that interruption of breast feeding rather than phototherapy may be an alternative treatment of jaundice and cause less family disruption and anxiety. However, there was now control group who continued breast feeding for comparison and so the results must be interpreted cautiously.

Quality - This study did not have a control group for comparison.

RID: 262 **Reference number** 4369

Baraff LJ;Bass JW;Fleisher GR;Klein JO;McCracken GHJ;Powell KR;Schriger DL;

Practice guideline for the management of infants and children 0 to 36 months of age with fever without source. Agency for Health Care Policy and Research.[see comment][erratum appears in Ann Emerg Med 1993 Sep;22(9):1490]

1993 22: (7) Annals of Emergency Medicine **pgs** 1198 1210

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Agency for Health Care Policy and Research

Conclusions The basis for this SR is not well described. Inclusion criteria, quality assessment and evidence tables not provided. Search was Medline only. A modified Delphi method was used for consensus. The reviewers define fever as 38 C and recommend that all febril infants less than 28 days be hospitalized for antibiotic therapy. Febrile infants 28-90 days of age who are "low risk" may be managed as outpaitents if close follow up is assured.

Quality - The SR does not describe quality assessment or provide evidence tables.Meadline search only.

RID: 147 **Reference number** 552

Boon JM;Lafeber HN;Mannetje AH;van O;Smeets HL;Toorman J;van d;

Comparison of ketoconazole suspension and nystatin in the treatment of newborns and infants with oral

1989 32: (6) Mycoses **pgs** 312 315

Study Type: Randomised Controlled Trial

Patient Characteristics Infants with clinical and culture proven Candida

Intervention Treatment with ketoconazole v. nystatin

Comparisons Cure rates

Study Length 2 weeks

Outcomes Frequency percents and p values

Effect After 1 week all 20 patients on ketoconazole were cured and only 8/15 patients on nystatin ($p<0.001$)

Funding Jansen Pharmaceutical

Conclusions It appears that ketoconazole is more effective than nystatin for thrush treatment. Clinical cure was confirmed mycologically . Fter one treatment week the improvement in the ketoconazole group was statistically significant ($p=0.012$).

Quality - Blinding and concealment allocation not discussed

RID: 178 **Reference number** 4276

Hoppe JE;

Treatment of oropharyngeal candidiasis in immunocompetent infants: a randomized multicenter study of miconazole gel vs. nystatin suspension. The Antifungals Study Group

1997 16: (3) Pediatric Infectious Disease Journal **pgs** 288 293

Study Type: Randomised Controlled Trial

Patient Characteristics Infants with clinical and culture positive thrush

Intervention Miconazole and nystatin

Comparisons Cure rates between three forms of treatment

Study Length 2 weeks

Outcomes Frequency percents; p values (statistical test not identified)

Effect Clinical cure rate was significantly higher with miconazole that with either nystatin preparation (p=0.0032 and =0.00068 respectively).

Funding Lederle

Conclusions It appears that miconazole is more effective than nystatin for treatment of thrush. Unfortunately the authors did not report information on allocation concealment or blinding.

Quality - Blinding and concealment allocation not addressed

RID: 192 **Reference number** 484

Longhi F;Carlucci G;Bellucci R;di G;Palumbo G;Amerio P;

Diaper dermatitis: a study of contributing factors

1992 26: (4) Contact Dermatitis **pgs** 248 252

Study Type: Randomised Controlled Trial

Patient Characteristics Children between 3-24 months

Intervention Two types of diaper both containing hydrogel superabsorbent materials in a cellulose mt surfact and the other in cellulose fluff

Comparisons Incidence of diaper dermatitis

Study Length 200 children for 14 weeks and 100 children for a further 30 weeks

Outcomes Frequency percents and p values (statistical test not described)

Effect Difference in diaper types was not statistically significant

Funding Unknown

Conclusions At the end of this study 2169 dermatological examinations were performed. The frequency of episodes of diaper dermatitis was 15.2%. The association between diaper type and rash was non significant. However statistical correlations between diaper dermatitis and age over 18 months($p<0.01$), atopic dermatitis ($p<0.05$) and illness ($p<0.01$ in diarrhoea; $p<0.01$ in URI and pyrexia) were noted.

Quality - Blinding, allocation concealment not discussed and possible Hawthorne effect

RID: 82 **Reference number** 22

Subcommittee on Hyperbilirubinemia AAoP;

Management of hyperbilrubinema in the newborn infant 35 or more weeks gestation

2004 114: (1) Pediatrics **pgs** 297 316

Study Type: Systematic Review

Patient

Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Natus Medical; WellSpring Parma; Minolta Inc.
Conclusions Although this guideline does not have a robust methodolgy to support the recommendations it does provide expert opinion in this field and is useful for background information.
Quality - This guideline is based on a medline search only and on expert consensus

Grading: *2++* *High-quality systematic reviews of case–control or cohort studies High-quality case–control or*

RID: 256 **Reference number** 227
Moyer VA;Ahn C;Sneed S;
Accuracy of clinical judgment in neonatal jaundice
2000 154: (4) Arch Pediatr Adolesc Med **pgs** 391 394
Study Type: Cohort
Patient Characteristics Healthy infants who were undergoing bilirubin measures
Intervention This is a comparative study between observers descrition of extent of jaundice and actual serum bilirubin measurements
Comparisons See above
Study Length
Outcomes A weighted K value for agreement between observers was calculated
Effect Agreement between observers regarding the presence of jaundice at each specific body site was poor (0%-23% agreement beyond chance). Correlation between estimated bilirubin concentrations was similarly poor (Pearson correlation coefficient 0.37).
Funding Unknown
Conclusions This study brings into question the accuracy of visual assessment of jaundice.
Quality ++ This is a study of a subjective measure of jaundice.

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 259 **Reference number** 4366
Alexander GS;Roberts SA;
Sucking behaviour and milk intake in jaundiced neonates
1988 16: (1) Early Human Development **pgs** 73 84
Study Type: Cohort
Patient Characteristics Full term formula fed babies ages 2-6 days with clinically detectable jaundice
Intervention Feeding parameters including milk consumption, sucking rate, active sucking time, pause time, sucking pressure and total serum bili on days 2-6 of life.
Comparisons See above

Study Length 6 days

Outcomes Students t test performed on derived measures

Effect The increase in milk consumption, active sucking time and sucking pressure show a consistent improvement with increasing age ($p<0.05$)and was greatest between the second and third day when highest bili values were observed.

Funding Wyeth

Conclusions In babies with clinical hyperbilirubinemia increase in milk consumption, active sucking time and sucking pressure was demonstrated over time and bili levels remained within acceptable limits. All babies remained healthy during the period of the study and there were no cases of hemolytic disease.

Quality + Visual analog scale is subjective;measures of sucking are objective

RID: 144 **Reference number** 601

Benjamin L;

Clinical correlates with diaper dermatitis

1987 14: Suppl 1 Pediatrician **pgs** 21 26

Study Type: Cohort

Patient Characteristic Infants recruited from a suburban midwestern population in the US - normal healthy infants between 1-20 months of age

Intervention Nappy (diaper) rash

Comparisons Diaper rash severity; effect of diaper change frequency on rash incidence; type of diaper and

Study Length Cross-sectional study

Outcomes Frequency percents and chi square

Effect Infants diapered exclusively in disposable diapers had a significantly ($p<0.02$) mean rash grade and significantly ($p<0.001$) lower incidence of moderate and severe rash. There was a strong association between severe rash and level of candida in the feces.

Funding Proctor and Gamble

Conclusions It appears that disposable diapers may be protective and that candida may be associated with severe rash but not an important etiologic factor in more moderate rash. Breastfed infants tended to have a lower incidence of moderate and severe rash ($p=0.015$)

Quality + Assessment of rash and questionnaires are subjective

RID: 173 **Reference number** 4273

Harrison S;Hutton L;Nowak M;

An investigation of professional advice advocating therapeutic sun exposure

2002 26: (2) Australian & New Zealand Journal of Public Health **pgs** 108 115

Study Type: Cohort

Patient Characteristic Hosppital based stff responsible for the care of pp women and babies in metropolitan and regional Queensland

Intervention Advice of professionals about sun exposure

Comparisons Professional advice regarding suspected neonatal jaundice

Study Length Corss-sectional survey

Outcomes Median values with inter-quartile ranges as well as wilcoxon rank sum tests for continuous variables and chi square tests for categorical variables.

Effect 42.1% of nursing staff, 54.2% of OB's, 23.8% of paediatricians, no neonatologist would recommend exposing the baby to sunlight. Midwives were significantly more likely to advise exposure of jaundiced infants than other nursing professionals ($p=0.004$).

Funding Cancer prevention research grant from Queensland Health.

Conclusions Yes - Due to potential for development of melanoma related to early childhood sun exposure, health care stff should be educated not to recommend sun exposure for treatment of infant jaundice.

Quality + This survey represents the subjective responses of a self selected group. However all are medical professionals.

RID: 258 **Reference number** 412

Maisels MJ;Gifford K;

Clinical and laboratory observations. Breast-feeding, weight loss, and jaundice

1983 102: (1) J Pediatr **pgs** 117 118

Study Type: Cohort

Patient Characteristic Infants who were delivered vaginally and were fully breast fed and received no supplementation with water or formula.

Intervention Relationship between breastfeeding, weight loss and jaundice.

Comparisons This study plotted serum bili leves against cumulative weight loss for each infant.

Study Length Three days

Outcomes Mean serum bili concentrations and mean weith losses; test of significance not discussed

Effect The mean weight loss for all infants was 5.8 gms. The mean serum bili concentration on day 3 was 7 mg/dl. No relationship was found when weight loss was plotted against bili values.

Funding Unknown

Conclusions Jaundice in breastfeeding babies does not appear to be related to weight loss or dehydration.

Quality + Overall effect likely to be accurate as measurements carried out in standarised manner

Grading: *2- Case–control or cohort studies with a high risk of confounding bias, or chance and a significant*

RID: 182 **Reference number** 640

Jaffe GV;Grimshaw JJ;

An open trial of clotrimazole plus hydrocortisone cream in the treatment of napkin dermatitis in general practice

1985 4: (5) Pharmatherapeutica **pgs** 314 318

Study Type: Cohort

Patient Characteristic Ranged from 3 weeks to 4 years. All had napkin dermatitis; 8 children had accompanying medical conditiions. Duration of symptoms differed.

Intervention Use of clotrimaxole and hydrocortison combination

Comparisons No comparative groups but improvements were compared. All three individual symptoms (severe, moderate, mild and absent) were improved at 7 days and at 14 days for those who required additional treatment (34 patients).

Study Length 7-14 days

Outcomes Chi square

Effect P<0.001 improvement for all symptoms

Funding Bayer UK Ltd.

Conclusions

Quality - Confounding may affect outcome

130 Are there effective assessment tools that identify infants at risk

Grading: *1++* *High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias*

RID: 364 **Reference number** 4636

Coulthard P;Yong S;Adamson L;Warburton A;Worthington HV;Esposito M;

Domestic violence screening and intervention programmes for adults with dental or facial injury

2004 Yong S John Wiley & Sons **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Cochrane Collaboration

Conclusions There is no evidence to support or refute that screening for domestic violence in adults with dental or facial injury is beneficial nor that it causes harm.

Quality ++

RID: 488 **Reference number** 4459

Towner E;Dowswell T;Jarvis S;

Updating the evidence. A systematic review of what works in preventing childhood unintentional injuries: part 1

2001 7 2 Inj Prev **pgs** 161 164

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Health Development Agency

Conclusions Although most studies in this review pertain to older children there is one section on prevention of home injury which is relevant. The results of these studies suggest that counselling, home assessments and the provision of home safety equipment can achieve some positive benefit but overall, results are inconclusive.

Quality ++

Grading: ***1+*** ***Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias***

RID: 281 **Reference number** 428

Clamp M;Kendrick D;

A randomised controlled trial of general practitioner safety advice for families with children under 5 years

1998 316 7144 Brit Med J **pgs** 1576 1579

Study Type: Randomised Controlled Trial

Patient Characteristics Families with children aged under 5 years registered with GP practice in Nottingham

Intervention Provision of safety info and low cost equipment to low income families

Comparisons Significantly more families in intervention group used safety equipment and safe practices than i in the control group (See below)

Study Length A questionnaire was administered at baseline and at follow up , six weeks after intervention by telephone by the GP or sent by post to those without a telephone.

Outcomes Relative risk of each piece of safety equipment and of safe practice

Effect Use of fireguards RR 1.89 1.18-2.94;use of smoke alarms RR 1.14 1.04-1.25;use ofsocket covers RR1.27 1.10-1.48; locks on cupboards for storing cleaning materials RR 1.38 1.02-1.88; door slam devices 3.60 1.06-1.58; storage of sharp objects RR 1.98 1.38-2.83; storage of medicines 1.15 1.03-1.28; window safety RR 1.11 1.06-1.58; fireplace safety RR 1.84 1.34-2.54; socket safety 1.77 1.37-2.28; smoke alarm safety 1.11 1.01-1.22; door slam safety RR 7.00 3.15-15.6.

Funding Nottingham Health Authority

Conclusions This study suggests that advice from health care practitioners in conjunction with provision of safety equipment for those on benefits may improve safety practices within the home.

Quality + There are some differences between intervention and control groups but level of significance not provided

RID: 493 **Reference number** 4518

Creery D;Mikrogianakis A;

Sudden infant death syndrome

2002 Brit Med J **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding BMJ Clinical Evidence

Conclusions This study assesses efects of interventions to reduce SIDS. Public health initiatives which provided advice to avoid prone sleeping were found to be effective. Other advice to avoid tobacco, avoid bed sharing , to avoid overheating were included in campaigns which addressed several risk factors and so an association with SIDS reduction could not be conclusively made. There was no evidence on the effect of advice to avoid soft sleeping

Quality + In some cases, observational evidence and nonsystematice reviews were used as

RCTs unlikely to be conducted

RID: 280 **Reference number** 285

Gielen AC;Wilson ME;McDonald EM;Serwint JR;Andrews JS;Hwang WT;Wang MC;

Randomized trial of enhanced anticipatory guidance for injury prevention

2001 155 1 Arch Pediatr Adolesc Med **pgs** 42 49

Study Type: Randomised Controlled Trial

Patient Characteristic These were families in a peadiatric continuity clinic in a large urgban teaching hospital. The child in the family had to be under 6 months of age.

Intervention This study aimed to evaluate an injury prevention anticipatory guidance training program for pediatric residents in the US

Comparisons Families were compared on amount of safety counselling, patient satisfaction, knowledge and beliefs

Study Length Families were followed up until the child was 12-18 months old.

Outcomes Chi square

Effect The IG residents, those who had additional safety training, provided significantly more counsellingon 4 of 6 safety practices s($p<0.001$ hot water, smoke alarms, syrup of ipecac; $p<0.05$ baby walkers) and parents wer significantly more satisfied with the help they received regarding safety ($p=.01$). Parent's knowlege, beliefs and home safety behaviors did not differe between the groups.

Funding Maternal and Child Health Bureau

Conclusions This study indicates that training for GPs (and other hc personnel) may improve use of safety practices. It does not use as an outcome measure the number of accidents prevented. There was also a high non participation rate in home observations.

Quality + Inconsistent participation by patients and subjective satisfaction scores

RID: 329 **Reference number** 4557

Macmillan HL;

Preventive healthcare 2000 update: prevention of child maltreatment (Structured abstract)

2000 163: 11 1111 Canadian Medical Association Journal **pgs** 1451 1458

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Canadian Task Force on Preventive Health Care

Conclusions This review makes evidence based recommendations for screening for child maltreatment. Because of the high false-positive rates of screening test and the potential for mislabelling people the possible harms outweigh the benefits.

Quality + Grading based on quality rated as good, fair or insufficient

RID: 342 **Reference number** 4643

Macmillan HL;Wathen CN;

Prevention and treatment of violence against women: systematic review and recommendations

2001 Canadian Task Force on Preventive Health Care (CTFPHC); **pgs**

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Canadian Task Force on Preventive Health Care

Conclusions Due to lack of a demonstrated link between screening and the reduction of violence outcomes, the Canadian Task Froce concludes that there is insufficient evidence to recommend for or against rotine screening for violence against either pregnant or non-pregnant women.

Quality + Non RCTs included in review

RID: 357 **Reference number** 4644

Nelson H;

Screening for family and intimate partner violence: recommendation statement.

2004 140: (5) Annals of Internal Medicine **pgs** 386 386

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding US Preventive Services Task Force, Agency for Healthcare Research and Quality

Conclusions Although these guidelines claim to be evidence based, this review did not give many details about the methodology. However, quality assessment grading tables are provided. The task force reviewed evidence for the effectiveness of screening procedures and interventions in the primary care seting in reducing harmful outcomes of domestic violence against children, women and older adults. No studies were found that directly addressed the impact of screening on reducing harmful outcomes.

Quality + The search and inclusion/exclusion criteria not clearly explained.

RID: 337 **Reference number** 4565

Nygren P;Nelson HD;Klein J;

Screening children for family violence: a review of the evidence for the US Preventive Services Task Force. [Review] [74 refs]

2004 2: (2) Annals of Family Medicine **pgs** 161 169

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Agency for Healthcare Research and Quality Contract

Conclusions The instruments studies had fairly high sensitivity but low specificity in high risk populations.

No trials of the effectiveness of sceening in a health care setting were found. Referrls to nurse home visitation during pregnancy and in early childhood may reduce abuse in selected

Quality + This review included non RCT's and no meta analysis

RID: 365 **Reference number** 4655

Peters, R. Barlow,J.

Systematic review of instruments designed to predict child maltreatment during the antenatal and postnatal

2003 12: (6) Child Abuse Review **pgs** 416 439

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Health Services Research Unit, Institute of Health Sciences, Oxford

Conclusions Although many of the included instruments obtained sensitivity and specificity above 80% only two of the included instruments combined specificity over 80% with a positive predictive value above 25%. A low PPV means that the majority of children classified as high risk were not actually maltreated.

Quality + Not all studies were RCTs

RID: 361 **Reference number** 4646

Ramsay J;Richardson J;Carter YH;Davidson LL;Feder G;

Should health professionals screen women for domestic violence: systematic review (Structured abstract)

2002 325: 7359 Brit Med J **pgs** 314 318

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding National Screening Committee

Conclusions Evidence for screening was drawn from 9 studies, 6 American, and one each in Australia, New Zealand and Canada. Screening produced an increase in rates of identification in eight of the studies but not in the study with the strongest design. Six studies investigated interventions, 5 American and one from New Zealand. None was an RCT. Only two of the studies measured rates of domestic violence as outcomes. One detected a reduction in violence for women identified in antenatal clinics after counseling and advocacy support and the other did not detect any reduction in violence after an advocacy program. About half to three quarters of women surveyed in primary care thought screening was acceptable. The conculsion was that althogh domestic violence is a common problem screening programmes in healthcare settings could not be justified as evidence of the benefit of intervention is needed.

Quality + Non RCTs included in review

RID: 293 **Reference number** 4476

Roberts I;Kramer MS;Suissa S;

Does home visiting prevent childhood injury? A systematic review of randomised controlled trials

1996 312 7022 Brit Med J **pgs** 29 33

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Unknown

Conclusions The conclusion of this study is that home visiting programmes have the potential to reduce signbificantly the rates of childhood injury but not in the first year of life. The pooled OR for 8 trials was 0.74 (0.60-0.92). Four studies examined the effect of home visiting on injury in the first year of life with OR 0.98 (0.62 to 1.53).

Quality + This is an old review - 1995. There is a potential for bias in outcome reporting in the studies reviewed

RID: 359 **Reference number** 4649

Wathen CN;Macmillan HL;

Interventions for violence against women: scientific review.[see comment]. [Review] [94 refs]

2005 289: (5) JAMA **pgs** 589 600

Study Type: Systematic Review

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding Canadian Institutes of Helth Research

Conclusions Screening instruments exist that can identify women who are experiencing intimate partner violence. No study has examined in a comparative design the effectiveness of screening when the endpoint is improved outcomes for wome as opposed to identificatio of abuse.

Quality + Non RCTs included

Grading: *1- Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias**

RID: 494 **Reference number** 4529

Institute for Clinical Systems Improvement (ICSI);

Preventive services for children and adolescents

2004 nstitute for Clinical Systems Improvement (ICSI); **pgs**

Study Type: Systematic Review
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Unknown
Conclusions Provides an outline of preventive services for ages birth -24 months with an evidence base which does not appear to have been the result of a systematic review.
Quality - Although this guideline claims to be evidence based a systematic review of the literature was not done.

RID: 500 **Reference number** 299
McVea KL;Turner PD;Peppler DK;
The role of breastfeeding in sudden infant death syndrome
2000 16: (1) Journal of Human Lactation **pgs** 13 20
Study Type: Metaananalysis
Patient Characteristics
Intervention
Comparisons
Study Length
Outcomes
Effect
Funding Olson Center for Women's Health, Omaha, Nebraska
Conclusions This meta analysis combines study types which are too heterogeneous to provide robust results. The studies were of fair to poor quality and results were not adjusted for confounding. The results are not reliable.
Quality - This meta analysis pooled data from case control studies and one cohort study. The studies were heterogeneous with respect to a variety of factors. The pooled results must be carefully interpreted.

Grading: *2+* *Well-conducted case–control or cohort studies with a low risk of confounding, bias or chance*

RID: 515 **Reference number** 4513
Alm B;Milerad J;Wennergren G;Skjaerven R;Oyen N;Norvenius G;Daltveit AK;Helweg-Larsen K;Markestad T;Irgens LM;
A case-control study of smoking and sudden infant death syndrome in the Scandinavian countries, 1992 to 1995. The Nordic Epidemiological SIDS Study
1998 78: (4) Arch Dis Child **pgs** 329 334
Study Type: Case-Control
Patient Characteristic Cases are infants who died of SIDS and controls were matched for sex, date of birth plus two weeks and maternity hospital.

Intervention Smoking was compared between cases and controls

Comparisons Cases and controls were compared on smoking before, during and after pregnancy. Father smoking was also studied.

Study Length One time questionnaire

Outcomes Multivariate ORs were calculated

Effect Maternal smoking was an independent risk factor: before 2.5 (1.7-3.7); during 3.6 (2.4-5.3) after 3.7 (2.5-5.5) pregnancy. Paternal smoking was NS.

Funding Nordic Council, the Swedish Medical Research Council, Medical Society of Goteborg, First of May Annual Flower Campaign, Norwegian Research Council, Swedish SIDS Parental Org, Norwegian SIDS Parental Org, Danish SIDS Parental Org.

Conclusions This study confirms the relationship between maternal smoking and SIDS.

Quality + Questionnaire methodology

RID: 505 **Reference number** 4514

Alm B;Wennergren G;Norvenius G;Skjaerven R;Oyen N;Helweg-Larsen K;Lagercrantz H;Irgens LM;
Caffeine and alcohol as risk factors for sudden infant death syndrome. Nordic Epidemiological SIDS Study

1999 81: (2) Arch Dis Child **pgs** 107 111

Study Type: Case-Control

Patient Characteristic Infants who died of SIDS and controls who were matched for sex, date of birth plus two weeks, and maternity hospital.

Intervention Risk factors for SIDS, specifically caffeine and alcohol.

Comparisons Cases and controls compared on caffeine and alcohol use during and after pregnancy.

Study Length NA

Outcomes Multivariate ORs were calculated

Effect Only heavy maternal use of alcohol after pregnancy was significant, OR (greater than or equal to 5 unites per day) 5.9 (1.0-33.9).

Funding Swedish Medical Research Council, The Nordic Council, Goteborg Medical Society, The first of May Annual Flower Campaign, the Norwegian Research Council, the Swedish SIDS Parental Organisation, the Norwegian SIDS Parental Organisation,the Danish SIDS Org.

Conclusions

Quality + Responses by mail questionnaire with possibility of subjectivity and selection bias

RID: 369 **Reference number** 4485

Arnestad M;Andersen M;Vege A;Rognum TO;
Changes in the epidemiological pattern of sudden infant death syndrome in southeast Norway, 1984-1998: implications for future prevention and research

2001 85: (2) Arch Dis Child **pgs** 108 115

Study Type: Case-Control

Patient Characteristic Infants who either died of SIDS or were matched with a SIDS victim with regard to sex, date of birth and place of birth and were picked at random from the national population register.

Intervention Increased or decreased risk of SIDS from 1984 to 1998.

Comparisons Factors studied included sleeping positions, co-sleeping, age of death and seasonal variation, maternal smoking, pregnancy complications, brest feeding, dummy use, social class, signs of infection and face covered at time of death.

Study Length NA

Outcomes Multivariate ORs were calculated

Effect The proportion of infants sleeping prone decreased along with the decrease in SIDS but still over half of the SIDS victims are still found in the prone position. Mother smoking during pregnancy was significant with OR 3.37 (1.37-8.25). Although the number ofSIDS infants found co sleeping increased over time, the OR was not significant. Cosleeping and smoking however hasd an OR of 8.63 (1.87-39.85). Breastfeeding was NS. Dummy use appeared to be protective in infants up to 4 months. There was not increased risk of side sleeping.

Funding Norwegian SIDS Society

Conclusions This study supports finds about prone position, co-sleeping with smokers, and protective effect of dummies.

Quality + Responses were by mail questionnaire. Subjectiviity and selection bias may be factors which cause bias.

RID: 529 **Reference number** 535

Blair PS;Fleming PJ;Bensley D;Smith I;Bacon C;Taylor E;Berry J;Golding J;Tripp J;

Smoking and the sudden infant death syndrome: results from 1993-5 case-control study for confidential inquiry into stillbirths and deaths in infancy. Confidential Enquiry into Stillbirths and Deaths Regional Coordinators and Researchers.

1996 313: 7051 Brit Med J **pgs** 195 198

Study Type: Case-Control

Patient Characteristic Cases are all SIDS deaths in three regions of England from Feb. 1993 to Jan. 1995. Four controls for each case, the next two older and next two younger, were identified by the HV.

Intervention Ths is a report from the SUDI study which assesses smoking, drugs and alcohol as risk factors for SIDS.

Comparisons Cases and controls are compared on levels of tobacco exposure, level of alcohol comsumption and use of illegal drugs.

Study Length Cases and controls were interviewed within one month of death of the index case.

Outcomes ORs of smoking exposure, alcohol consumption and illegal drug use were measured.

Effect There was dose response to number of cigarettes smoked and number of hours exposed: cigarettes 1-19 OR 2.47 (1.29-4.73), 20-39 OR 3.96 (2.40-6.55), >40 OR 7.57 (4.00-14.32); hours 1-2 OR 1.99 (1.14-3.46), 3-5 OR3.84 (1.97-7.48), OR 6.78 (3.17-14.49). There was no significant effect of maternal alcohol consumption. Illegal drug use in either parent was significant: mother OR 2.80 (1.10-7.18), partner OR 4.18 (2.06-8.48).

Funding National Advisory Body for the confidential inquiry into stillbirths and deaths in infancy

Conclusions This study confirms the association of smoking with SIDS

Quality + The geographic proximity of cases and controls may underestimate the effect of sociodemographic factors

RID: 530 **Reference number** 4491

Blair PS;Fleming PJ;Smith IJ;Platt MW;Young J;Nadin P;Berry PJ;Golding J;

Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome. CESDI SUDI research group.

1999 319: 7223 Brit Med J **pgs** 1457 1461

Study Type: Case-Control

Patient Characteristics All infants who died of SIDS in five regions of England over three years Feb. 1993 -March 1996. Four controls per case identified by HV born two weeks older and two weeks younger than incident case.

Intervention Co sleeping and SIDS

Comparisons Bed and room sharing between cases and controls. Associated risks are also evaluated including smoking, alcohol use, fatigue, overcrowding and infant being under a duvet.

Study Length Interviews were conducted within one month of index case death

Outcomes ORs for SIDS with bed sharing/room sharing

Effect Bed sharers who were put back in their cot had NS risk. Bed sharers at the end of sleep OR 9.78 (4.02-23.83). Sofa sharer OR 48.99 (5.04-475.60); solitary sleeper compared to room sharer OR 10.49 (4.29-25.81); bed sharing if on parent smokes OR 12.35 (7.41-20.59);parents who do not smoke NS risk with bed sharing. Infants older than 14 weeks NS risk with bed sharing; younger infants had an OR 4.65 (2.70-7.99).

Funding National Advisory Body for CESDI and the Foundation for the Study of Infant Deaths.

Conclusions This study highlights some important points about bed sharing. It apears that there is risk if parents are smokers or babies are less than 14 weeks old.

Quality + Geographic proximity may affect ability to assess effect of socioeconomic factors

RID: 525 **Reference number** 4515

Blair PS;Nadin P;Cole TJ;Fleming PJ;Smith IJ;Platt MW;Berry PJ;Golding J;

Weight gain and sudden infant death syndrome: changes in weight z scores may identify infants at increased risk.

2000 82: (6) Arch Dis Child **pgs** 462 469

Study Type: Case-Control

Patient Characteristics Cases of SIDS from 5 areas of Britain over three years from 1993 to 1996. Four controls for every case identified by HV,next two older and next two younger infants in relation to index

Intervention Relationship of weigh gain and SIDS

Comparisons Cases and controls compared on growth rate from birth to final weight observation

Study Length Interviews completed within one month of index case death.

Outcomes OR of weight at 6 weeks and change in z scores

Effect Among infants with normal birth weight the OR was 1.97 (1.49-2.61) for weight at 6 weeks and 1.73 (1.38-2.16) for change in z score.

Funding National Advisory Body for the confidential enquiryinto stillbirths and deaths in infantcy and the Foundation for the Study of Infant Deaths.

Conclusions SIDS infants particularly those of normal birth weight exhibited poorer weight gain than controls and the difference was apparent within the first five to seven weeks of life.

Quality + Geographic distribution may influence evaluation of sociodemographic features

RID: 377 **Reference number** 4492

Brooke H;Gibson A;Tappin D;Brown H;

Case-control study of sudden infant death syndrome in Scotland, 1992-5.[see comment]

1997 314: 7093 Brit Med J **pgs** 1516 1520

Study Type: Case-Control

Patient Characteristics Newborns who either died of SIDS or were born immediately before and after an index case in the same maternity unit. Controls were thus matched for age, season and maternity unit.

Intervention Modifiable risk factors for SIDS are being investigated.

Comparisons Cases and controls are compared on social and prenatal factors, feeding regimen, sleeping habits, sleeping environment, exposure to smoking and illnesses.

Study Length All home visits were made within 21 days of the index case's death.

Outcomes Multivariate analysis odds ratios were calculated

Effect OR for modifiable risk factors included : both parents smoking 5.19 (2.26-11.91); OR for mother only smoking was 5.05 (1.85-13.77). OR for sleeping in a prone position was 6.96 (1.51 - 31.97); OR for has moved under bedclothes was 2.18 (1.03-4.64). Babies who slept on an old mattress had an OR of 2.51 (1.39-4.52).Receiving any drug treatment in the week before death emerged as a strong risk factor OR 2.33 (1.10-4.94). Poverty was confirmed as a significant risk factor. The risk increased with the number of cigaretted smoked by the mother (p=0.0001) and father p=0.0001 and if a mother who smoked shared a bed with the infant

Funding Scottish Cot Death Trust

Conclusions This study supports other findings in relation to parental smoking and sleeping prone.

Quality + This information was collected by questionnaire at a home visit. May be

RID: 534 **Reference number** 4494

Carpenter RG;Irgens LM;Blair PS;England PD;Fleming P;Huber J;Jorch G;Schreuder P;
Sudden unexplained infant death in 20 regions in Europe: case control study.

2004 363: 9404 Lancet **pgs** 185 191

Study Type: Case-Control

Patient Characteristics Cases are SIDS deaths; controls not described

Intervention 56 potential risk factors

Comparisons Modifiable risks include infant position, cosleeping, smoking and dummy use.

Study Length One time questionnaire

Outcomes Multivariate ORs

Effect OR for prone sleeping 13.1 (8.51-20.2); mother smoked < 10 cigarettes per day 1.52 (1.10-2.09); mother smoked >10 cigarettes per day 2.43 (1.76-3.36); mother smoked and shared a bed 17.7 (10.3-30.3). Other smokers in house after birth also had a significant dose response risk. Dummy use was protective 0.74 (0.58-0.95). For mothers who did not smoke in pregancy the risk for bed sharing was only significant for infants younger than 8 weeks. Odds of a baby having its head covered was 12.5 (6.47-24.1)

Funding European Union and the Foundation for the Study of Infant Deaths

Conclusions Yes, smoking is supportd as a risk factor for SIDS and once again, dummy use appears to be protective. Bedsharing with a maternal smoker is a high risk behaviour.

Quality + Questionnaires are subjective and have potential selection bias. There was heterogeneity because of a geographically diverse sample.

RID: 380 **Reference number** 52

Carroll-Pankhurst C;Mortimer EAJ;
Sudden infant death syndrome, bedsharing, parental weight, and age at death.[see comment]

2001 107: (3) Pediatrics **pgs** 530 536

Study Type: Case-Control

Patient Characteristics Infants who died of SIDS

Intervention Death in the presence of large mothers when bed sharing and when not bed sharing

Comparisons Bedsharing infants who died of SIDS are compared to non bedsharing infants who died on relationship of age at SIDS and maternal weight

Study Length NA

Outcomes P values are reported for differences between the means

Effect Large maternal size was not associated with an increased risk of earlier SIDS deth in the absenceof bedsharing. SIDS death occurred significantly earlier in the presence of parent

infant bedsharing than in the absence of bedsharing (p=0.48)

Funding Greater Cleveland Healthy Start

Conclusions This study showed that bedsharing was strongly associated with a younger age at death independent of other risk factors.

Quality + Bedsharing determined from medical record

RID: 503 **Reference number** 534

Douglas AS;Alexander E;Allan TM;Helms PJ;

Seasonality of birth in sudden infant death syndrome

1996 41: (2) Scottish Medical Journal **pgs** 39 43

Study Type: Cohort

Patient Characteristics All SIDS victims from 1979-1990 in Scotland

Intervention Seasonality of birth and relationship to SIDS

Comparisons Birth month cohorts were compared

Study Length Study was conducted to assess annual pattern

Outcomes Incidence and seasonal amplitude

Effect Amplitutde was twice as great for infants born in September than in April. The average age of SIDS death was between 2-4 months.

Funding Scottish Cot Death Trust

Conclusions There is a lowering of risk by one third amongst babies born in February-May compared to those born in August-November. Seasonal variation of death was twoice as great for births in September as compared with those in April. Advice on subsequent pregnancy delivery date may be appropriate for families who have already experienced SIDS.

Quality + Measure of seasonality of birth in SIDS with large Scottish cohort likely to reflect seasons accurately

RID: 501 **Reference number** 596

Dwyer T;Ponsonby AL;Blizzard L;Newman NM;Cochrane JA;

The contribution of changes in the prevalence of prone sleeping position to the decline in sudden infant death syndrome in Tasmania.

1995 273: (10) JAMA **pgs** 783 789

Study Type: Cohort

Patient Characteristic Infants born in one of the six major obstetric hospitals who scored as high risk on locally constructed predictive model.

Intervention Changes in the prevalence of infant and enviornmental exposures over time as estimated from the cohort.

Comparisons Before and after analysis of various risk factors particularly prone position.

Study Length 10 weeks

Outcomes Adjusted OR for prevalence after compared with prevalence before

Effect A lower prevalence of prone position in the postintervention birth cohort accounted for 70% of the SIDS rate decline in the cohort. None of the other changes could account for a significant component of the rate decrease.

Funding Tasmanian State Government, Australian Rotary Health Research Fund, National Health and Medical Research Council of Asutralia, US National Institutes of Health grant, National SID Councit of Australia, et al.

Conclusions This study supports the change in infant positioning as a primary factor in SIDS reduction campaigns.

Quality + Three interviews decrease bias due to subjectivity and recall. Only 'high risk' infants

included.Risk assessment not validated.

RID: 382 **Reference number** 4496

Fleming PJ;Blair PS;Bacon C;Bensley D;Smith I;Taylor E;Berry J;Golding J;Tripp J;
Environment of infants during sleep and risk of the sudden infant death syndrome: results of 1993-5 case-control study for confidential inquiry into stillbirths and deaths in infancy. Confidential Enquiry into Stillbirths and Deaths Regional Coordinators **pgs**

1996 313: 7051 Brit Med J 191 195

Study Type: Case-Control

Patient Characteristics Cases: All deaths from SIDS in infants aged 7 to 364 days in two NHS regions in the UK from Feb. 1993 and a third regiion from Sept. 1993 until January 1995.
Controls: Four controls for each case. The HV identified the two babies on her list next older and the two babies next younger, withing two weeks of age of the index baby.

Intervention Sleep environment as a risk for SIDS

Comparisons Cases and controls were compared on sleeping position , weight of bedding, arrangement of bedding, sleep locations.

Study Length Interviews were done within one month of the index case death

Outcomes ORs were calculated for all factors studied (see above)

Effect Prone sleeping 9 (2.84-28.47); Side sleeping compared to supine: 1.84 (1.02-3.31); bedsharing with parents all night 4.36 (1.59-11.95); using dummy 0.38 (0.21-0.70); covers over head OR 18.93 (8.05-44.48)

Funding National Advisory Body for the confidential inquiry into stillbirths and deaths in infancy

Conclusions This study provides information about modifiable risk factors for SIDS and may direct future public health efforts.

Quality + The influence of socioeconomic conditions may be underestimateddut to the method of control selection.

RID: 507 **Reference number** 4525

Fleming PJ;Blair PS;Pollard K;Platt MW;Leach C;Smith I;Berry PJ;Golding J;
Pacifier use and sudden infant death syndrome: results from the CESDI/SUDI case control study. CESDI SUDI Research Team.

1999 81: (2) Arch Dis Child **pgs** 112 116

Study Type: Case-Control

Patient Characteristics Cases are SIDS deaths in five regions of England for three years, 1993-1996. Four controls were identified by HV, two younger and two older.

Intervention Use of pacifier and relationship to SIDS

Comparisons Use of dummy never, sometimes, often, always, and at time of last sleep.

Study Length Interviews were completed one month after death of index case

Outcomes OR for dummy use

Effect Use of pacifier in last sleep OR 0.41 (0.22-0.77).There was no association between pacifier use and sleeping position .

Funding National Advisory Body ofor CESDI, the Foundation for the Study of Infant Deaths and the International Children's Medical Research Asociation

Conclusions It appears that pacifier use may be protective. This needs to be explored in light of the BFI recommendations to avoid use of pacifiers in breastfed babies.

Quality + Geographic proximity may influence analysis of sociodemographic variables

RID: 528 **Reference number** 4526

Ford RP;Hassall IB;Mitchell EA;Scragg R;Taylor BJ;Allen EM;Stewart AW;
Life events, social support and the risk of sudden infant death syndrome

1996 37: (7) Journal of Child Psychology & Psychiatry & Allied Disciplines **pgs** 835 840

Study Type: Case-Control

Patient Characteristics Infants who died of SIDS and randomly selected infants from study region

Intervention Effect of stress and social support on risk of SIDS

Comparisons Cases vs controls and stressful life events and maternal social support index

Study Length One interview within 7 weeks of death

Outcomes Adjusted ORs

Effect Maternal social support was not found to be significant. The adjusted analysis of stressful life events was not significant.

Funding Health Research council of New jZealand and the Hawkes Bay Medical Research Foundation.

Conclusions This study found that stressful life events and maternal support were not significant risk factors for SIDS but the sociodemographic confounders may work through additional life stresses so over adjusting may have occurred. The researchers recommend further study.

Quality + Interviews may result in subjectivity and recall bias.

RID: 498 **Reference number** 4527

Ford RP;Mitchell EA;Stewart AW;Scragg R;Taylor BJ;
SIDS, illness, and acute medical care. New Zealand Cot Death Study Group

1997 77: (1) Arch Dis Child **pgs** 54 55

Study Type: Case-Control

Patient Characteristics Infants who died of SIDS and randomly selected controls from all births in the study regions.

Intervention Illness and use of medical services among SIDS infants was investigated.

Comparisons Cases vs controls on illness severity and visits to GP and hospital in two weeks prior to death

Study Length One interview within 7 weeks of infant's death

Outcomes Adjusted ORs

Effect Severe illness significant in SIDS infants, OR 2.36 (1.14-4.90); only 1.3% of all SIDS cases had symptoms of severe illness and did not see a GP.

Funding Health Research Council of New Zealand and Hawke's Bay Medical Research Foundation.

Conclusions This study indicates that lack of medical contacts in the two weeks before death does not contribute to the risk of SIDS.

Quality + Interviews may be subjective and recall bias can occur

RID: 521 **Reference number** 643

Ford RP;Taylor BJ;Mitchell EA;Enright SA;Stewart AW;Becroft DM;Scragg R;Hassall IB;Barry DM;Allen EM;et a;
Breastfeeding and the risk of sudden infant death syndrome

1993 22: (5) International Journal of Epidemiology **pgs** 885 890

Study Type: Case-Control

Patient Characteristics Infants who dies of SIDS and randomly slected controls from all births in the study region.

Intervention Relationship between length of breastfeeding and SIDS

Comparisons Cases vs controls on duration of breastfeeding

Study Length One interview within 7 weeks of death

Outcomes Adjusted ORs

Effect Infants exclusively breastfed at discharge from hospital (OR 0.52, 0.35-0.71) and those exclusively breastfed during the last 2 days (OR 0.65, 0.46-0.91)

Funding Health Research Council of New Zealandand Hawkes Bay Medical Research Foundation.

Conclusions This study indicates that there is a protective effect of breastfeeding for the risk of SIDS.

Quality + Subjectivity and recall bias may occur in interviews

RID: 388 **Reference number** 4501

McGarvey C;McDonnell M;Chong A;O'Regan M;Matthews T;

Factors relating to the infant's last sleep environment in sudden infant death syndrome in the Republic of

2003 88: (12) Arch Dis Child **pgs** 1058 1064

Study Type: Case-Control

Patient Characteristic Infants who died of SIDS and controls who were selected at random from the birth register and matched for date of birth and geographical location.

Intervention Sleeping environment including co-sleeping

Comparisons Cases vs. controls on sleeping position, cop-sleeping, use of pillows , duvets, tog value of bedding and use of soothers.

Study Length One time interview withing 6 weeks of death.

Outcomes Multivariate ORs

Effect Prone position (OR 11.47, 1.24-106.06); co-sleeping (OR16.47, 3.73-72.75), absence of routine soother use (OR5.86, 2.37-14.36). The risk of bedsharing increased with maternal smoking (OR 29.23, 2.69-316.78) and was not significant for infants who were >20 weeks or infants placed back in their own cots to sleep.

Funding Unknown

Conclusions This study provides additional eveidence that prone position and maternal smoking are significant risk factors for SIDS. The protective effect of rountine pacifier use is also supported.

Quality + Home interviews: subjectivity and recall bias possible.

RID: 288 **Reference number** 4455

Reading R;Langford IH;Haynes R;Lovett A;

Accidents to preschool children: comparing family and neighbourhood risk factors

1999 48 3 Social Science & Medicine **pgs** 321 330

Study Type: Cohort

Patient Characteristics Children with moderate or severe injuries who attended A&E from August 1993-July 1995

Intervention Influence of individual family versus neighbourhood in safety risk

Comparisons Comparison of neighbourhoods for accident rates and comparison with individual level risks

Study Length Records for ages 0-4 were evaluated

Outcomes OR's

Effect For all levels of accidents the proportion of variance explained in the model by individual child characteristics was about 90% and the remaining 10% was explained by the social areal score. The significante of the effect of living in a depreived neighbourhood was greater for more severe accidents with an OR 1.49 times greater in the most deprived areas.

Funding Anglia and Oxford NHS Executive

Conclusions Yes, this study identifies risk factors for accident in young children

Quality + Authors created a statistical method to construct socially homogeneous geographical areas

RID: 393 **Reference number** 4505

Scheers NJ;Rutherford GW;Kemp JS;
Where should infants sleep? A comparison of risk for suffocation of infants sleeping in cribs, adult beds, and other sleeping locations

2003 112: (4) Pediatrics **pgs** 883 889

Study Type: Cohort

Patient Characteristic Infants who died of SIDS and living infants younger than 8 months from a randomly selected annual sample.

Intervention To ascertain whether the number of sudden infant deaths as a result of suffocation in adult beds, on sofas or chairs, and on other sleep surfaces was actually increasing when compared to deaths in cribs. Reports in the 1980s and 1990s were compared and SIDS victims of the 1990s were also compared to living infants of that time.

Comparisons

Study Length This is a retrospective study

Outcomes Adjusted ORs and frequency percents were compared.

Effect Infants in adult beds were 8.1 times more likely to be reported in the 1990s than in the 1980s (CI 3.2-20.3). This effect is controlled for age, sex, race and season but not for position or maternal smoking. The risk for suffocation among infants in adult beds was 40 times higher than the risk for suffocation in crib

Funding Office of Planning and Evaluation, the Consumer Product Safety Commission, USA

Conclusions This study highlights the risk of infants sleeping in adult beds.

Quality + Only 82% of deaths are reported to this agency and confounders such as position of infant and maternal smoking were not available from death certificates

RID: 1566 **Reference number** 5039

Tappin D;Ecob R;Brooke H;
Bedsharing, Roomsharing, and Sudden Infant Death Syndrome in Scotland: A Case-control Study

2005 147 1 J Pediatr **pgs** 32 37

Study Type: Case-Control

Patient Characteristic Cases were parents of SIDS babies and controls were parents of babies born just before or after the SIDS victim in the same hospital

Intervention Relationship of infant mattresses and bedsharing to infant death

Comparisons Cases and controls were compared on the type of mattress used and bedsharing

Study Length Interviews occurred within 28 days of death

Outcomes Chi square was calcuated

Effect Sharing a sleep surface was associated with SIDS (OR 2.89, 1.40-5.97). The largest risk was with couch sharing (OR66.9, CI 2.8 -1597). Sharing a bed when <11 weeks old was significant for SIDS (OR10.20, 2.99-34.8). The association remained if mother did not smoke (OR 8.01, 1.20-53.3). The OR for SIDS is baby was in a separate room, not bedsharing was 3.26 (1.03-

Funding Scottish Cot Death Trust

Conclusions The researchers conclude that the revised UK Department of Health advice that '...the safest place for your baby to sleep is in a cot in your room for the first six months' is supported by this research.

Quality + Results are based on parental interviews which could introduce bias; cases and controls were matched on bith time and place

Grading: ***2-*** ***Case–control or cohort studies with a high risk of confounding bias, or chance and a significant***

RID: 370 **Reference number** 171

Ball HL;

Reasons to bed-share: why parents sleep with their infants

2002 20: (4) Journal of Reproductive and Infant Psychology **pgs** 207 221

Study Type: Qualitative

Patient Characteristics

Intervention

Comparisons

Study Length

Outcomes

Effect

Funding

Conclusions DOES THIS GO INTO THE EXTRACTIONS? I HAVE PUT THIS IN Nancy

Quality

RID: 291 **Reference number** 4454

Ramsay LJ;Moreton G;Gorman DR;Blake E;Goh D;Elton RA;Beattie TF;

Unintentional home injury in preschool-aged children: looking for the key--an exploration of the inter-relationship and relative importance of potential risk factors

2003 117: (6) Public Health **pgs** 404 411

Study Type: Case-Control

Patient Characteristics Cases were 0-4 year old Scottish children who presented to A&E with one of four injury categories – fall over 1 m; poisonings; burns/scalds; fingertip injuries. Two controls who had not attended A&E in 6 months were identified for each case and matched in age, gender and selected from caseload of the same health visitor so were effectively matched on deprivation.

Intervention Cases and controls were compared on socio-demographic factors, physical environment, use of safety equipment, aspects of the child's health, previous injury, social support, recent life events and personal well-being of the main carer.

Comparisons Risk factors between cases and controls

Study Length One time interview

Outcomes P values and confidence intervals are reported as well as frequency percents. ORs are not reported

Effect Three factors were significant predictors of accidental injury, $p<0.01$: carer having no qualifications (CI 3.75-246), not experiencing a non medically attended accident (1.38-9.80) and socket covers not being used (1.31-6.48).

Funding Chief Scientist Office, Scottish Dept. Health

Conclusions This study must be interpreted with caution as confidence intervals are very wide, the study was underpowered and the home visitors were not blinded to case/control status.

Quality - The study is underpowered but does provide some interesting data, considering that the sample was effectively matched on deprivation. The findings need to be verified in larger studies

Grading: ***3*** ***Non-analytic studies (for example, case reports,***

case series)

RID: 383 **Reference number** 4497

Hauck FR;Herman SM;Donovan M;Iyasu S;Merrick M;Donoghue E;Kirschner RH;Willinger M;
Sleep environment and the risk of sudden infant death syndrome in an urban population: the Chicago Infant Mortality Study

2003 111: (5 Part 2) Pediatrics **pgs** 1207 1214

Study Type: Case-Control

Patient Characteristics Matched on race/ethnicity, age at death/interview and birth weight.

Intervention Risk factors for SIDS were investigated

Comparisons Cases and controls were compared on sleep environment, including position, cosleeping, sleep surface, URI, pacifier use

Study Length One time interview

Outcomes SIDS death is the outcome

Effect Prone sleeping OR 2.3(1.5-3.5); Soft surface 5.1 (2.9-9.2);pillow use 3.1 (1.6-5.8); Hed covered 2.5 (1.2-5.2); URI 2.2 (1.3-3.5); pacifier use 0.3 (0.2-0.5); breastfeeding every 0.4 (0.2-0.7); breastfeeding current 0.3 0.2-0.7); shared bed with anyone 2.0 (1.2-3.3); shared be with others 4.1 (2.0-8.4)

Funding NIH

Conclusions This study identifies risk factors forSIDS and lends support to similar studies which identify similar risks.

Quality + Results of home interview included 500 questions - recall bias and subjectivity possible

RID: 384 **Reference number** 4498

Hunsley M;Thoman EB;
The sleep of co-sleeping infants when they are not co-sleeping: evidence that co-sleeping is stressful

2002 40: (1) Developmental Psychobiology **pgs** 14 22

Study Type: Cohort

Patient Characteristics Newborns who were studied at 5 weeks of age and 6 months of age

Intervention Sleep patterns and cosleeping

Comparisons Non co sleepers, sort term co sleepers and long term co sleepers were studies with respect to sleep cycles

Study Length 6 months

Outcomes Mean sleep wake measures for the three groups were calculated and significant differences determined.

Effect At 6 months of age the long term co sleeping infants showed more quiet sleep and longer bouts of quiet sleep ($p<0.001$); they also showed less wakefulness ($p<.01$). This sleep pattern has been repeatedly found to be an indicator of stress.

Funding NICHD

Conclusions This study indicates that co sleeping may be stressful for infants.

Quality + Study relies on mothers' accurate reporting of cosleeping

RID: 339 **Reference number** 4567

Weberling LC;Forgays DK;Crain TC;Hyman I;

Prenatal child abuse risk assessment: a preliminary validation study

2003 82: (3) Child Welfare **pgs** 319 334

Study Type: Cohort

Patient Characteristic 98 women were recruited from physician's offices and local agencies erving pregnant women in Washington State USA

Intervention Validity data on the BCRS tool to identifiy RR for child abuse

Comparisons Two risk tools administered antenatally were compared with results on HOME testing and Parental Stress Inventory (PSI) at 3 months postpartum to assess predictive value of the antenatal tests

Study Length From first antenatal visit until 3 months postpartum

Outcomes One way analysis of variance was calculated for differences in HOME scores and PSI scores between risk groups.

Effect No significant differences existed in PSI by risk group. HOME scores between high and low risk mothers differed significantly, p<.01 and between high and moderate risk (no p value given).

Funding Brigid Collins House and faculty research grant, Western Washington University.

Conclusions This study highlights the difficulties of screening for child abuse.

Quality High drop out rate;self selected sample;subjective — This was a small self selected sample and the measures used for evaluatin were subjective assessments of home environment and stress