Why GRADE?

quality of evidence

GRADE evidence profile table

Quality assessment						Summary of findings						
						No of patients		Effect			Quality	Importance
No of studies (Ref)	Design	Limitations	Consistency	Directness	Other considerations	Intervention	Control	Baseline risk (without treatment) (95%CI)	Relative risk (95%CI)	NNT/NNH (95%CI)		
Benefits:												
Outcome												
Harms:												
Outcome												

NICE evidence table

23. Does the method of management of the third stage of labour affect outcomes?

Routine management of the third stage – active management of the third stage

Bibliographic reference	Study type	Evidence level	Number of patients	Patient characteristics	Intervention	Comparison	Length of follow-up	Outcome measures	Effect size	Source of funding	Additional comments
Prendiville W.JElbourne D.McDonald S; 2005 [illegible]	Systematic review - meta-analysis	Evidence level: 1+	5 trials	All women who expected a vaginal delivery	Intervention: Active management of the third stage of labour, which is here defined as the package of interventions (cord clumping; prophylactic oxytocin; controlled cord traction)	Comparison: Expectant management of the third stage of labour	Follow-up period: N/A	Outcome Measures: PPH (clinically estimated blood loss greater than or equal to 500mls); severe PPH (clinically estimated blood loss greater than or equal to 1000mls); mean blood loss (mls); maternal haemoglobin concentration (Hb) < 9gms/decilitre 24 to 48 hours post partum; blood transfusion; iron tablets during the puerperium; therapeutic oxytocics; third stage > 20 minutes; third stage > 40 minutes; mean length of third stage (minutes); manual removal of the placenta; subsequent surgical evacuation of retained products of conception; diastolic blood pressure >100mmHg between delivery of baby and discharge from the labour ward; vomiting between delivery of baby and discharge from the labour ward; nausea between	Active vs expectant management (all women) PPH clinically estimated blood loss greater than or equal to 500mls 4 trials 6284 women Relative Risk (Fixed) 95% CI 0.38 [0.32, 0.46] Severe PPH clinically estimated blood loss greater than or equal to 1000mls 4 trials 6284 women Relative Risk (Fixed) 95% CI 0.33 [0.21, 0.51] Mean blood loss (mls) 2 trials 2941 women Weighted Mean Difference (Fixed) 95% CI -79.33 [-94.29, -64.37] Maternal Hb < 9 g/dl 24 - 48 hours post partum 4 trials 4255 women Relative Risk (Fixed) 95% CI 0.40 [0.29, 0.55] Blood transfusion 5 trials 6477 women Relative Risk (Fixed) 95% CI 0.34 [0.22, 0.53] Iron tablets during the puerperium	Nil	

Intrapartum care. Evidence tables. London: RCOG Press; 2007

SIGN – evidence table

SIGN 50: A guideline developers' handbook
Completed Evidence Table

Evidence table for intervention studies

Question: Which tooth cleaning methods have been shown to be most effective in preventing dental caries and what are the risks and barriers associated with these?

Bibliographic citation	Study type	Ev lev	Number of patients	Patient characteristics	Intervention	Comparison	Length of follow up	Outcome measures	Effect size	Source of funding
Wendt, L. K., Hallonsten, A. L., Koch, G. and Birkhed, D. Oral hygiene in relation to caries development and immigrant status in infants and toddlers. Scandinavian Journal of Dental Research. 1994:102,269-73.	Cohort Study	+	1 yr olds caries-free = 629 , 2 year olds caries free = 298 ; 3 year olds caries free = 270	Pre-school children; community-based; Immigrant status = (a) Swed, i.e. at least one parent born in Sweden and (b) Immi, i.e. both parents born outside Sweden. Caries-free at 1 year of age.	Presence of caries + oral health habits	Presence or absence of dental caries, gingivitis and visible plaque.	3 years	Presence or absence of dental caries	Visible plaque at 1 year of age: 29% carious lesions by 2 years, + 54% carious lesions by 3 years.	
General comments: Potential confounding factors not addressed, i.e. gender + heterogeneity of different ethnic groups. Not enough evidence to support a recommendation on its own.										
Verrips, G. H., Kalsbeek, H., Van Woerkum, C. M., Koelen, M. and Kok-Weimar, T. L. Correlates of toothbrushing in preschool children by their parents in four ethnic groups in The Netherlands. Community Dental Health. 1994:11;233-9.	Survey	+	614 children examined 476 parents interviewed	4 different ethnic groups / Selection by district and ethnic group / Community based	Questionnaire on parental attitudes/beliefs regarding toothbrushing - as predictors of caries risk			Risk factors for dental caries	1. Age at start of brushing as a risk factor: 29% of diff. In scores between Turkish grp. and Dutch and Surinamese (reference group) could be attributed to the role of all potential correlates, i.e. parental habits, attitudes, beliefs etc. 2. Frequency of brushing : Relatively strong relationship between freq. and attitudes and habits (i.e. 54% of difference attributed to these correlates.	
General comments: Selection bias due to 67% of Moroccan respondents being illiterate. No details of how well terminology was explained, e.g. caries, molars etc. Possible recall bias. Importance of health education in advocating frequency of brushing more than once daily + commencement of brushing before 2 yrs. of age.										

U.S. Preventive Services Task Force evidence table of overall evidence

Table 5. **Summary of Overall Evidence**

Key Question	Studies, *n*	Study Designs (Reference)	Quality	Conclusions
1. Penetrance of hemochromatosis	11	1 retrospective cohort study (46)	Good: Genotyping of surviving Busselton, Australia, cohort; potential selective mortality bias appears minimal. Small numbers.	17 y of clinical data for 10 screening-detected general population C282Y homozygotes illustrates variable disease expression and incomplete penetrance. Incomplete follow-up into older age where disease penetrance increases.
		1 retrospective and prospective cohort study (47)	Fair: Genotyping of representative Danish cohort during third examination. Results are likely to be compromised by selective mortality bias due to 35% loss of follow-up. Even accounting for potential bias, disease penetrance about 60%.	Additional 23 screening-detected C282Y homozygotes from the general population also illustrates variable disease penetrance and variable patterns of iron accumulation. No liver biopsies to confirm iron overload or disease.
		9 cross-sectional studies (32, 51–58)	Fair to good: Studies compromised by frequent inclusion of already-identified C282Y homozygotes (not clearly screening-detected), by different standards for disease, and by potential selection bias due to non–protocol-based selection for further clinical work-up.	Estimates of disease in newly identified C282Y homozygotes at screening are too limited to provide confident estimates of penetrance.
2. Efficacy of phlebotomy treatment	5	4 case series (25, 58–60)	Fair to poor: Studies compromised by selective samples, reporting on cases not clearly comparable to current diagnosis and treatment, incomplete follow-up on all cases, and failure to account for possible confounders in analyses.	Total number of reported cases is quite small and represents disease experience over 50 y. There are no data to determine the benefit of earlier treatment among screening-detected compared with contemporarily diagnosed clinical cases.
		1 retrospective survey (55)	Fair: Possible recall bias in determining response to treatment.	Treatment is recalled to relieve some but not all symptoms in a survey of patients with hereditary hemochromatosis.
3. High-risk groups	7	7 cross-sectional studies (51, 57, 61–63, 65, 66)	Fair to good: Studies examined prevalence of C282Y homozygotes in various selective populations for possible targeted screening.	Patients selected on basis of certain signs and symptoms, in combination with phenotypic testing, may be at increased risk; data are still fairly limited.

GRADE
un aiuto alla trasparenza?

GRADE Evidence Profile - QUESTION: Should active management of the third stage of labour be used [by skilled providers] for all women to prevent PPH?

Quality assessment						Summary of findings						
						No of patients		Effect			Quality	Importance
No of studies (design)	Design	Limitations	Consistency	Directness	Other consider-ations	Active manage-ment	Standard procedures	Baseline Risk (95%CI)	Relative risk (95%CI)	NNT (95%CI)		
Benefits:												
Maternal deaths												
0	-	-	-	-	-	-	-	-	-	-	-	8.5
Admission to intensive care unit												
0	-	-	-	-	-	-	-	-	-	-	-	6.4
Blood loss ≥ 500 ml												
4 PW 00[1] Ad 97 Br 88 Du 90 Hi 98	RCT	serious limitation[2,3,17] -1	no important inconsistency	some uncertainty about directness[4,5] -1	none	3126	3158	min 8.3% (6.3, 10.3) max 17.9% (15.3, 20.5)	0.38 (0.32, 0.46)	min 8 (6.7, 11.2) max 16 (11.7, 24.7)	low quality ++oo	6.3
Blood loss ≥ 1000 ml												
4 PW 00[1] Ad 97 Br 88 Du 90 Hi 98	RCT	serious limitation[2,3,17] -1	no important inconsistency	some uncertainty about directness[4,5] -1	none	3126	3158	min 1.5% (0.6 2.4) max 3.2% (2.0-4.4)	0.33 (0.21, 0.51)	min 41 (26.5, 90.1) max 73 (43.3, 225.5)	low quality ++oo	7.7
Need for blood transfusion												
5 PW 00[1] Ad 97 Br 93 Br 88 Du 90 Li 90	RCT	minor limitation[3,5]	no important inconsistency	some uncertainty about directness[7] -1	none	3229	3248	5.7% (4.1-7.2)[16]	0.34 (0.22, 0.53)	28 (18.7, 59.1)[16]	moderate quality +++o	7.8

GRADE Evidence Profile - QUESTION: Should active management of the third stage of labour be used [by skilled providers] for all women to prevent PPH?

Quality assessment						Summary of findings						
						No of patients		Effect			Quality	Importance
No of studies (design)	Design	Limitations	Consistency	Directness	Other consider-ations	Active manage-ment	Standard procedures	Baseline Risk (95%CI)	Relative risk (95%CI)	NNT (95%CI)		
Harms												
Side effect requiring treatment												
1 PW 00[1] Hi 98	RCT iron tablets during the puerperium	minor limitation[3]	one trial only	some uncertainty about directness[15] -1	none	716	731	28% (24.8, 31.3)	0.80 (0.49, 0.74)	-9 (-14.5, -6.5)	moderate quality +++o	6.2
Manual removal of placenta												
5 PW 00[1] Ad 97 Br 93 Br 88 Du 90 Hi 98	RCT	serious limitation[3,17] -2	major inconsistency[18] 1	some uncertainty about directness[4,5] -1	imprecise and sparse data -1	3229	3248	min 0.14% (-0.13, 0.41) max 2.59% (1.53, 3.66)	1.21 (0.82, 1.78)	min NS max 39 (26.4, 75.2)	very low quality oooo	6.2
Nausea												
3 PW 00[1] Br 88 Du 90 Hi 98	RCT	serious limitation[3,17] -2	no important inconsistency	some uncertainty about directness[4,10] -1	none	1680	1727	min 8.77% (3.56, 13.99) max 11.50% (9.21, 13.78)	1.83 (1.51, 2.23)	min 7 (4.0, 24.4) max 18 (11.8, 36.0)	very low quality +ooo	4.0
Vomiting												
3 PW 00[1] Br 88 Du 90 Hi 98	RCT	serious limitation[3,17] -2	no important inconsistency	some uncertainty about directness[9,10] -1	none	1680	1727	min 1.75 (-0.67, 4.18) max 6.48 (4.82, 8.13)	2.19 (1.66, 2.86)	min 10 (5.6, 37.9) max 18 (12.0, 35.4)	very low quality +ooo	4.7

GRADE quality assessment

Quality assessment					
No of studies (Ref)	**Design**	**Limitations**	**Consistency**	**Directness**	**Other considerations**
Benefits:					
Outcome					

Harms:					
Outcome					

GRADE quality assessment

Studies are classified in 4 types of study design:
1. RCT – randomised controlled studies or randomised cluster trials
2. Interrupted time-series (or quasi-experimental design)
3. Observational studies (both cohort-studies and case-control studies)
4. Other types of design: case-series and case.reports,

Quality					
No of studies (Ref)	**Design**				
Benefits:					
Outcome					

Harms:					
Outcome					

GRADE quality a

Quality assess					
No of studies (Ref)	Design	Limitations			
Benefits:					
Outcome					
Harms:					
Outcome					

For randomised controlled trials (RCTs), the main criteria for assessing trial limitations are:

- concealment of allocation to treatment group,
- blinding for measurement of subjective outcomes,
- intention-to-treat analysis, withdrawals/loss of follow-up.

the Newcastle-Ottawa checklist and its Manual) is recommended for evaluating observational studies

GRADE quality asse

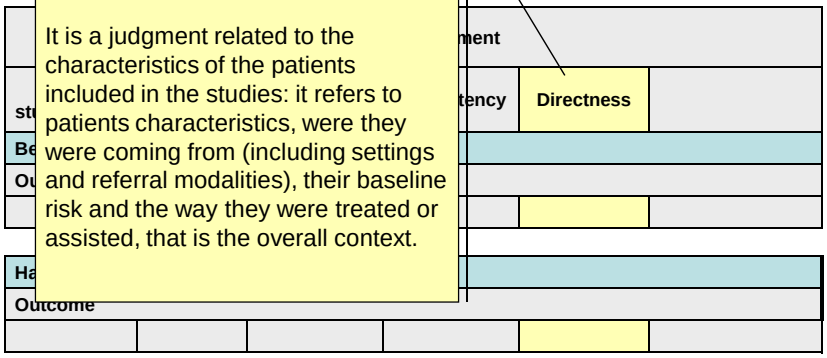
Quality assessment					
No of studies (Ref)	Design	Limitations	Consistency		
Benefits:					
Outcome					
Harms:					
Outcome					

To evaluate the degree of consistency of the results among available studies one should look at the confidence interval and the direction of the effect to see whether there is substantial certainty or uncertainty about the estimate of effect.

GRADE quality assessment

Directness or generalisability or external validity of study results or applicability are all synonymous.

It is a judgment related to the characteristics of the patients included in the studies: it refers to patients characteristics, were they were coming from (including settings and referral modalities), their baseline risk and the way they were treated or assisted, that is the overall context.



GRADE quality assessment

Two dimensions could be a reason for downgrading (sparse date and reporting bias).

Three dimensions could be a reason for upgrading the quality of available studies (strong association, dose response and direction of confounding factors)