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Handling Common Kid's Problems- Concurrent Breakout Session RepeatedFriday, 10 June 2011Start 2:00pmDuration: 60minsWorksStart 4:00pmDuration: 60minsWorks

Rotorua GP CME 2011

General Practice Conference & Medical Exhibition



09-12 June 2011 | Energy Events Centre | Rotorua



## **Common Kids' Problems**

Nikki Turner and Marguerite Dalton June 2011



#### List of common referrals to Middlemore Hospital Paediatric Clinic

- a 4 day period

Not walking, 13 eczema 5 cardiac 4 neurological / seizures Facial swelling Feeding problems Obesity FTT **Coeliac Disease** Constipation Urine Dislocation of jaw Lump on ear Premature menarche **Undescended testis** Infected umbilicus 2 asthma 2 allergies 2 respiratory problems 1 tongue tie 1 post head injury 1 headache



- Chronic coughs
- Constipation
- Head shapes
- Skin rashes
- Recurrent illnesses/nutrition
- Behaviours/screening tools in toddlers
- New Well child schedule
- Infant colic
- Tummy pains
- Dummies/SIDS



### **Brief scenarios**



#### 9 year old Charlotte is brought in by her mother complaining of a runny nose and sore throat for the last 2 days.

OE afebrile, chest clear, ears nad, rhinitis, moderate pharyngitis, shotty cervical lymphadenopathy



Would you.....

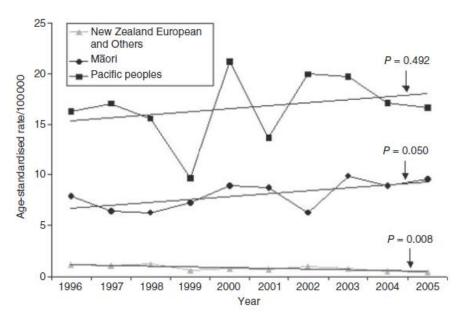
# Watch and wait Take a throat swab Give 10 days antibiotics



*"antibiotics only to treat bacterial infections appearing to have taken root with health professionals,* PHARMAC annual review 2009

#### NZ has 13.8 times the rates of Rheumatic fever cf to OECD average

NZCYES 2007



Jaine R, et al. J Paediatr Child Health 2008; 44: 564-71.



#### Charlotte's 2 year old brother presents at the same time with a moist cough for 2 weeks.... Would you use antibiotics?

#### Rates for serious bacterial infections and respiratory diseases International comparisons

Disease	Other OECDcountries relative rate	NZ relative rate
Meningococcal disease	1	1998 <b>5-17</b>
	(Australia, Canada, USA)	2007 1
Rheumatic fever	1 (OECD)	13.8
Serious skin infections	1 (USA, Australia)	2
Whooping cough	1 (UK, USA)	5-10
Pneumonia	1 (USA)	5-10
Bronchiectasis	1 (Finland)	8

Craig E, et al. NZCYES: Indicator Handbook. 2007.



## Hospitalisation for serious bacterial infections and respiratory diseases risk by 'DEPRIVATION' 0-14 yr 2002-2006

Cause of hospital admission	Least deprived (NZDep1)	Most deprived (NZDep10)	
Meningococcal disease#	1	4.93	
Rheumatic fever	1	28.65*	
Serious skin infection	1	5.16	
Tuberculosis	1	5.06*	
Gastroenteritis	1	2.00	
Bronchiolitis##	1	6.18	
Pertussis	1	3.70*	
Pneumonia	1	4.47	
Bronchiectasis	1	15.58	
Asthma	1	3.35	
#0-24yr ##<1yr *NZDep9-10			













Penelope is 5, she has had difficultly passing poo since 1 year of age, more recently daily soiling with urgency to go at school. Past history of large painful poos as a baby. He is otherwise well. With no behavioural problems



#### Prevalence

- Various studies 0.3 28% children
- 20% women self report
- 10-20 % adults use laxatives regularly



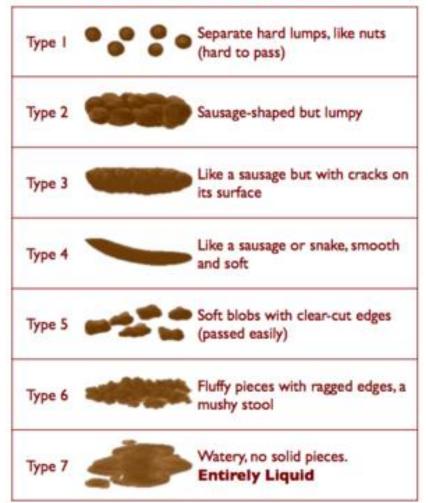
#### Aetiology

- Acute post fever, diet, drugs,
- Chronic most childhood constipation is functional



#### Consistency

#### **Bristol Stool Chart**



#### Acute Management - Disimpact

#### Mild / Moderate

Severe

- Lactulose alone
- or with Senokot

Movicol

For Consideration:

-? Role of AXR-? Role of suppositories/enemas



#### **Education**

Not your fault Team approach Medication needs Regular toileting Record / star charts Positive approach



#### Resources

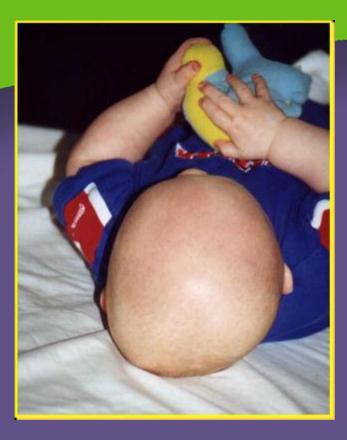
- Starship KidsHealth.org.nz
  www.kidshealth.org.nz
- Westmead Hospital Syndey

<u>www.chw.edu.au/parents/factsheets/</u> Royal Childrens Hospital Melbourne www.rch.org.au/kidsinfo/

University of Virginia

www.healthsystem.virginia.edu/internet/pediatric s/parents/tutorials/constipation/home.cfm



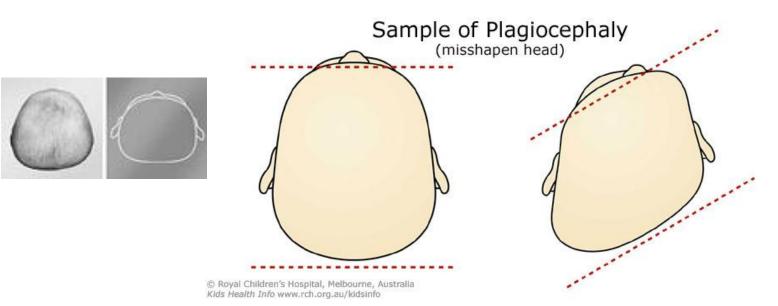


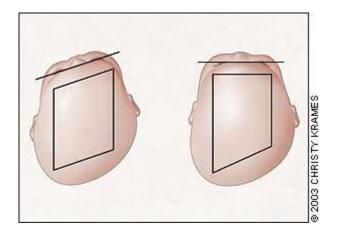
## My 5 month old baby has a very odd looking head shape. Is he normal?

Image from http://www.neurosurgeons4kids.com/PedNeuroSite



#### Head shapes





#### Questions

- When did you notice shape; was it present at birth
- Birth process?
- Is baby's head always held to one side
- How much time spent in car seat/buggy
- Sleep position?
- Is the arm movement/position the same on both sides (?Erbs Palsy)
- Ck head circumference

#### **Positional Plagiocephaly**

#### At birth

- in utero eg. multiple births
- birth trauma eg. forceps

#### After birth

- prematurity
- torticollis/neck muscle imbalance
- delayed motor development
- one sided handling
- sleep position
  - Supine
  - head facing same way
- buggies and car seats



#### **Risk Factors**

Pediatrics 2007, 119(2):e408 -e418

#### At Birth

- being male
- first born
- brachycephaly (short head)

#### 7 weeks

- being male
- first born
- positional preference when sleeping
- only bottle feeding
- positioning to same side when feeding
- head to same side as bedroom furniture
- tummy time less than 3 times a day
- slow achievement of physical milestones

#### No link with back sleeping or with the birth itself (natural/forceps) or length of labour



Rx?

- Positional and handling advice
- Helmets etc.....no strong evidence to date



#### **Plagiocephaly and Development**

#### Increased risk of developmental problems



Hutchinson B L et al Arch Dis Child 2011;96:85-90 (NZ study)

#### At 3- 4 years:

- About 2/3 revert to normal
- 4% severe at follow up
- % children with developmental delay decreased from 41% initially to 11%



# What is this and should I be worried about it?

























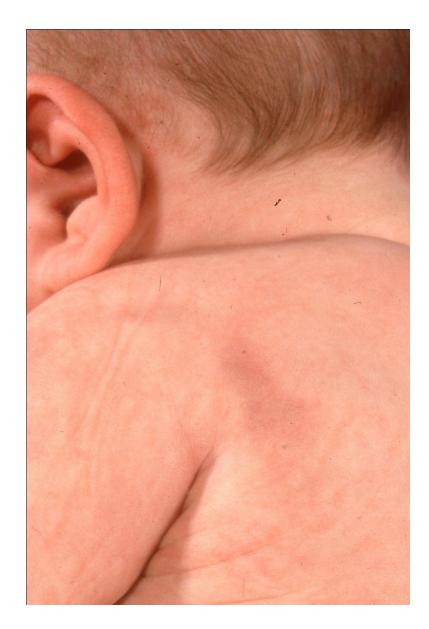




























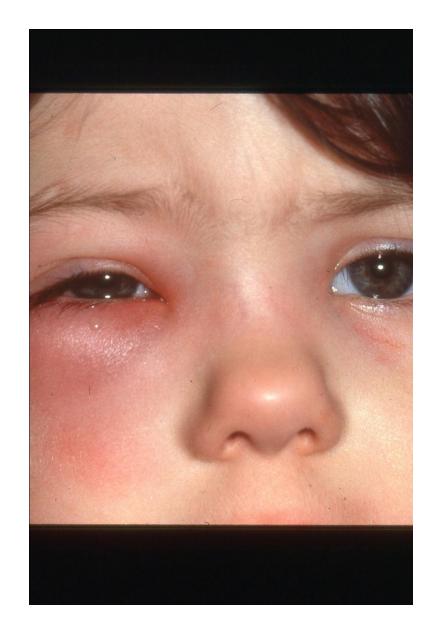




























The Plunket Nurse has referred 13 month old Sina to you. She has recently been in hospital with pneumonia and seems to get a lot of colds and recurrent infections.

## Why does she get sick?

#### Spread of the Bug

- Overcrowded
- Surrounded by other sick people
- Hygiene coughing, handwashing

#### Weaker immune response

- Stressed
- Not fully immunised
- Poor nutrition

#### Reduced access to health care services

- Mother/family knowledge level
- Late presentation
- Cost/access

#### Iron deficiency

- Neurophysiological abnormalities
  - Less interactive, less able to learn
  - Breath holding more prevalent
  - Poorer scores on cognitive function tests, school performance
- 14% Ak children under 2 years of age

Ref: Grant CC et al 'Policy statement on iron deficiency in pre-school aged children' J Paediatrics and Child Health 43(2007) 513-521

# **Risk factors**

- More common in Maori, Pasifica and non-European groups
- Full term infants sufficient stores first 6 months of life
  - risk of deficiency: increases with BW<3000g</li>
- Dietary risks: introducing cows milk in 1<sup>st</sup> yr life
- Exclusive breast feeding beyond 6 months
- Vegetarian infants



#### Rx

• Diet

#### Iron supplementation

- Single or bd dose
- 3-6mg/kg/day ferrous sulphate for 3/12 minimum
- Combined with fruit, fruit juice (vit C)
- After 6 weeks twice weekly



- Skeletal bone mineralization and immune modulator effects
  - rickets
  - Increased risk of type 1 diabetes
  - Increase risk of pneumonia, wheezy illnesses
  - ?role in excessive LRTI in NZ
- Periodontal disease



# Vitamin D deficiency

#### Auckland infants 6 – 23 months

- Deficiency in 10% overall
- 5 fold variability with season

More likely

- Pacific (RR 7.6)
- Not receiving infant or follow on formula (RR 5.7)
- Not receiving vitamin supplementation (RR 5.32)
- Living in more crowded houses (RR 2.36)
- No link:prolongued breast feeding, dietary restrictions

#### Ref Grant CC et al Public Health Nutrition 2009, 12(10),1893-1901

#### MOH:

High risk infants, children:

- are born to vitamin D deficient mothers
- are not regularly exposed to sunlight before 11am or after 4pm
- have darker pigmented skin (skin types 5 and 6)
- have their skin covered by clothing (for example, veiling)
- have a low dietary intake of vitamin D
- have prolonged breastfeeding (for example recent migrants with refugee status from Africa and the Middle East)

Food and Nutrition Guidelines for Healthy Infants and Toddlers (0-2): A background paper (MOH 2008)



#### Recs

- Children hands, face, arms or legs exposed to sun 2 – 3 times weekly for 5-10 minutes (non-pigmented skin), 10-15 Minutes (pigmented skin), not between 11.00 and 16.00 hours in summer months NZ Cancer Society
- Rx 10mcg (400IU) supplement daily
  - Alfacalcidol oral drops 2mcg/ml
  - Cacitriol oral drops 1mcg/ml



#### Joshua is 3

He has just started kindy

- He won't sit still for mat time
- He is always on the go
- He won't share toys
- He only wants to play outside
- He climbs all over the furniture
- He won't settle to sleep for afternoon nap Is this ADHD?



#### **Behaviour in context**

- Developmental
- Environmental (different settings)
- Expectations
- Genetic/Familial
- Medical issues ( diet / allergy/ medication etc.)



Screening tools.....

- PEDS
- Ages and Stages
- SDQ

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#### **PEDS RESPONSE FORM**

Child's Name Child's Birthday				
1. Please list a	ny concer	ns about y	our child's learning, develo	pment, and behaviour.
			t how your child talks and	makes speech sounds?
Circle one: No	Yes	A little	COMMENTS:	
3. Do you hav	e any con	cerns abou	it how your child understa	nds what you say?
Circle one: No	9 Yes	A little	COMMENTS:	
4. Do you hay	e anv con	cerns abou	t how your child uses his a	or her hands and fingers to do things?
<i>Circle one:</i> No		A little	COMMENTS:	in the market and might to do unings.
on one one. Ite	105	ir mue	COMMENTE:	
5. Do you hav	e any con	cerns abou	t how your child uses his o	or her arms and legs?
Circle one: No	Yes	A little	COMMENTS:	
6. Do you hav	e any con	cerns abou	t how your child behaves?	
Circle one: No	Yes	A little	COMMENTS:	
7 Do you hav	o anu con	come abou	t how your child gets alon	g with others?
<i>Circle one:</i> No			COMMENTS:	g with others:
Gircle one: NO	ies ies	A nuie	COMMENTS:	
8. Do you hav	e any con	cerns abou	t how your child is learnin	g to do things for himself/herself?
<i>Circle one:</i> No	9 Yes	A little	COMMENTS:	
9. Do you hav	e any con	cerns abou	t how your child is learnin	g preschool or school skills?
Circle one: No			COMMENTS:	
to pt to				
10. Please list	any other	concerns.		
Convright Centre (	for Community C	hild Health Author	rised Australian Version. Adapted with permissi	ion from Frances Page Glascoe, Ellsworth & Vandermeer Press Ltd.

#### PEDS SCORE FORM - AUTHORISED AUSTRALIAN VERSION

Child's Name :					Date of	Birth:		_ Date(s) of	scoring:			
Find appropriate column for the child's age. Place a tick in the appropriate box to show each concern on the PEDS Response Form. See Brief Scoring Guide for details on categorising concerns. Shaded boxes are significant predictors of difficulties. Non-shaded boxes are non significant predictors.												
<sup>Child's Age:</sup> Global/Cognitive	0-3 mos	4-5 mos	6-11 mos	12-14 mos	15-17 mos	18-23 mos	24-35 mos	36-47 mos	48-53 mos	54-71 mos	72-83 mos	84-96 mos
Expressive Language and Articulation												
Receptive Language												
Fine Motor												
Gross Motor												
Behaviour												
Social-emotional												
Self-help												
School												
Other												
Count the number of tie	cks in the s	mall shaded	boxes and j	place the tot	al in the larg	e shaded bo	x below.					
If the number shown in the large shaded box is 2 or more, follow <b>Path A</b> on PEDS Interpretation Form. If the number shown is exactly 1, follow <b>Path B</b> . If the number shown is 0, count the number of ticks in the small unshaded boxes and place the total in the large unshaded box below.												
If the number shown in	the large u	unshaded bo	ox is 1 or mo	re, follow <b>P</b>	<b>th C</b> . If the r	umber 0 is :	shown, cons	ider <b>Path D</b> i	if relevant. C	)therwise, fo	llow <b>Path E</b> .	
© Copyright 2006	Centre for Co	ommunity Chi	ild Health. Au	thorised Austr	alian Version.	Adapted with	permission fr	om Frances Pa	age Glascoe, E	llsworth & Va	ndermeer Pres	ss Ltd.

Child's Name: \_\_\_\_\_Date of Birth: \_\_\_\_

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#### **Specific Decisions**

PEDS INT	<b>FERPRETAT</b>	ION FORM	0–3 mos.
Path A: Two or more	Yes? Two or more concerns about self-help, social,	also needed for social work, occupational/physiotherapy,	4-5 mos
significant Yes? ->	school, or receptive language skills? No?	mental health services, etc. Refer for intellectual and educational assessments. Use professional judgment to decide if speech-language, audiological, or other evaluations are also needed.	12–14 mos.
			15–17 mos
Path B:	Screen or refer	If screen is passed, counsel in areas of concern and monitor carefully.	18–23 mos.
One significant predictive concern?	for screening.	If screen is failed, refer for testing in area(s) of difficulty .	24–35 mos
Path C: Non significant concerns?	Counsel in areas of difficulty and follow up in several weeks.	If unsuccessful, screen for emotional/behavioural problems and refer as indicated. Otherwise refer for parent training, behavioural intervention, etc.	36-47 mos
	No?	Use a second screen that directly elicits children's skills or refer for	
Path D: Parental difficulties Yes? ->	Foreign language a barrier?	screening elsewhere.	54–71 mos.
communicating.	Yes?	Send PEDS home in preparation for a second visit; seek an interpreter, or refer for screening elsewhere.	72–83 mos.
Path E: No concerns? Yes? ->	Elicit any concerns at future time-point?	Use PEDS at future time-point.	84-96 mos.
	for Community Child Health. Autho om Frances Page Glascoe, Ellsworth &		



#### Conduct disorder/ ADHD in older children

#### Points to consider

- Behaviour on developmental / learning context
- Environments
- Genetics
- ABC of behaviour
- What has been tried
- Medication
- Parenting courses do work for older children too



#### Ages and Stages

#### www.agesandstages.com



Ages & Stages Questionnaires\*, Third Edition (ASQ-3)

Ages & Stages Questionnaires\*: Social-Emotional (ASQ:SE)



#### Strengths and Difficulties Questionnaires

http://www.sdqinfo.org/

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Child's name	Male/Female
Date of birth	

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings			
Restless, overactive, cannot stay still for long			
Often complains of headaches, stomach-aches or sickness			
Shares readily with other children, for example toys, treats, pencils			
Often loses temper			
Rather solitary, prefers to play alone			
Generally well behaved, usually does what adults request			
Many worries or often seems worried			
Helpful if someone is hurt, upset or feeling ill			
Constantly fidgeting or squirming			
Has at least one good friend			
Often fights with other children or bullies them			
Often unhappy, depressed or tearful			
Generally liked by other children			
Easily distracted, concentration wanders			
Nervous or clingy in new situations, easily loses confidence			
Kind to younger children			
Often lies or cheats			
Picked on or bullied by other children			
Often volunteers to help others (parents, teachers, other children)			
Thinks things out before acting			
Steals from home, school or elsewhere			
Gets along better with adults than with other children.			
Many fears, easily scared			
Good attention span, sees work through to the end			

Signature .....

Date .....

Parent / Teacher / Other (Please specify):

Thank you very much for your help



## Changes to Well Child schedule 2010 - 12

- Eight core universal free contacts, but with greater flexibility in the timing of the contacts based on individual family need as much as possible, particularly for more vulnerable families and first time parents.
- Tympanometry check for glue ear at three years of age will be <u>phased out</u> of the Well Child Schedule (with at-risk children continuing to be checked) and replaced with screening audiometry as part of the B4SC.
- Routine preschool vision and hearing screening will be provided at age four as a component of the B4SC, replacing the current school entry screening programme.
- The Parental Evaluation of Developmental Status (PEDS) questionnaire, for identifying child developmental issues will be introduced at <u>all checks from 3</u> <u>months of age</u>
- An oral health screen, risk assessment and completion of an enrolment for dental services at the 9-12 month check, and a greater focus on oral health at the other core contacts will be introduced.
- WHO Growth Charts will be introduced and used from birth to five years.

#### **Maternal Depression screening**

During the past month have you often been bothered by feeling down, depressed or hopeless?

During the past month have you often been bothered by little interest or pleasure in doing things?

Is this something with which you would like help?

Yes/No/Yes but not today

Ref: Arroll B et al

Edinburgh Postnatal Depression Scale (EPDS)



## Lift the Lip and Look

- Are there white lines of patches on the front teeth
- Encourage parents to Lift the Lip, monthy
- Encourage brushing
- Sugar drinks
- Bottles in bed
- Brown marks
  - front teeth
  - back teeth





Fig 2: Healthy teeth and gums. No signs of decay and only a little plaque.



Fig 3: Chalky patches (arrows) and also an enamel breakdown on the side of one of the front teeth.



Fig 4: Clearly visible decayed front teeth, both in-between upper front teeth, and along the gumline.



Fig 5: Well-advanced decay. The crowns of the top teeth are breaking down and decay is starting between the bottom teeth.



Fig 6: Only the roots of the top teeth are left.



Fig 7: Deep decay in the lower back teeth (molars).





Sarah is now 8 weeks old and doesn't sleep at all, screams intermittently all evening and through the night, refuses the breast. I'm exhausted

Image from: www.littlies.co.nz/page.asp



#### Probiotics

#### ?Cows milk allergy

- use extensively hydrolysed formulas (poor palatability, limited efficacy): use only in severe cases or with associated atopic sx
- no evidence for use of soya formula
- maternal diet unclear, need 2 week trial
- Chiropractic spinal manipulation 3 reasonable RCTs, no effect Chiropractic spinal manipulation for infant colic: a

systematic review of randomised clinical trials, E. Ernst International Journal of Clinical Practice 63(9);1351-1353 Sep 2009

#### Behavioural remedies

- Supplemental carrying, car ride stimulators no effect. Infant massage
   some benefits to mothers/infant interactions
- Regularity and uniformity in infant care and reduction in external stimuli, swaddling during sleep – possible effective
- Attention to parent/child interactions

Savino F, Tarasco V New treatments for infant colic Current Opinion in Pediatrics 2010, 22:791–797

#### **Medications**?

- Cimetropium bromide (antimuscarinic)
- Simethicone not shown to be effective
- Acid suppression not effective
- PPIs not effective and concerns re long term use



# After 20 minutes of your squeeze in acute consultation

By the way doctor..... My daughter is 2 and she regularly complains of tummy ache. What do you think is wrong with her? Is she allergic to food or milk?



# tummy pain in a toddlercould this be milk allergy?

- Food allergy common (3% or more) but only 1 in 10 of those who believe they are food allergic have a true allergy
- Risk factors genetic
  /atopic/cultural/other allergies
- Presentation can include nausea, vomiting cramps and diarrhoea



#### **Abdominal pain in toddlers**

#### **Common causes**

- Acute
- Infection
- Constipation
- Behavioural





#### Should I use a dummy with my newborn baby to reduce the risk of Cot Death

#### **American Academy of Pediatric Task Force 2005**

recommends using a pacifier [dummy] to reduce SUDI/SIDS risk throughout the first year of life as follows:

- Pacifiers should be used when putting infants down for sleep and should not be reinserted once the infant falls asleep.
- If the infant refuses the pacifier, he/she should not be forced to take it.
- Pacifiers should not be coated in any sweet solution.
- They should be cleaned often and replaced regularly.
- For breastfed infants, delay introduction until one month of age to ensure breastfeeding is established.

Ref:American Academy of Pediatrics Policy Statement. 2005. The changing concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleeping Environment, and New Variables to Consider in Reducing Risk. Pediatrics. Nov 116(5):1245–1255