

WINTER ILLSS MYTHS EXPOSED

The 'Winter ills in Children' edition of best practice journal appears to have exposed a few myths about the management of these common conditions in primary care.

The results of the quiz, reveal a good understanding of the issues by most GPs. There are marked differences from the results of a pre-publication copy of the quiz sent to a sample of GPs.

It appears that 'Winter Ills' has markedly increased awareness that anti-pyretic medications, such as paracetamol and ibuprofen, do not reduce the chances of febrile convulsions and that febrile convulsions do not cause brain damage or intellectual impairment. There is also increased knowledge that alternating or combining paracetamol and ibuprofen is no more effective than using either medication alone. It is acceptable to swap from one medication to another if the first choice is not effective.

There have also been very marked changes in understanding about cough in children. Cough variant asthma and post-natal drip are not significant causes of persistent cough in children and cough medicines are not effective for childhood cough beyond their placebo effect.

Another myth exposed involved the use of cow's milk for fluid replacement in children with gastroenteritis. Most GPs now know that undiluted cow's milk is okay to use for fluid replacement in children over one year of age with gastroenteritis.

We hope you enjoy the feedback from the GP panel. Those of you who responded to the quiz will receive personalised feedback including comments from our key adviser.

bpac team

QUIZ FEEDBACK

1. A nine-month-old child had three days of upper respiratory symptoms and has now developed cough, wheeze and fever. She has had no health problems in the past. Chest examination reveals widespread wheezing. She is a bit irritable and appears to be feeding normally but stops more often during her feeds. Her respiratory rate is 55 per minute. She has mild chest wall indrawing but no cyanosis or nasal flaring. Your diagnosis is bronchiolitis. Select the response(s) which are likely to be part of your management.

	GP Panel	Your Peers
Hospitalisation		10%
Inhaled adrenalin		1%
Inhaled salbutamol		10%
Oral steroid		6%
Parent education	✓	95%

GP Panel

Some respondents would give medications, inhaled salbutamol (10%) or oral steroids (6%), for this child with mild bronchiolitis. The panel commented that although there is no evidence of effectiveness for these interventions, presuming the diagnosis of bronchiolitis is correct, it is very hard to appear to be doing nothing for a sick young child. There are circumstances when a trial* of inhaled salbutamol is worth considering. For example, if the child has a previous history of interval wheeze or atopy, and the salbutamol administration does not distress the child.

The panel would not consider hospitalisation for this child unless home circumstances indicated the child might not get good support at home. They would ensure the parents had good understanding of warning signs and leave the door open for a review if required. Parent education is essential (95% of respondents agreed).

The symptoms of bronchiolitis usually peak at three days and thereafter improvement can be expected.

*Suggested trial of salbutamol, if indicated: small volume spacer, 100 mcg salbutamol with 4-6 breaths repeated up to six times and reviewed clinically after 20 minutes. Discontinue if there is no improvement in wheeze/respiratory distress.

2. Select the true statement(s) about acute cough in children.

	GP Panel	Your Peers
Cough is normal for a few weeks after birth		2%
Cough suppressants are all that is needed for most viral coughs in children		3%
Five percent of coughs persist beyond four weeks.	✓	91%
Majority of coughs resolve within one week.	✓	89%
Normal temperature excludes pneumonia		5%

GP Panel

This question was answered well by most respondents. The panel felt it important to note that although temperature is usually high with pneumonia a normal temperature does not exclude it.

3. Select the true statement(s) about cough in children persisting for more than four weeks.

	GP Panel	Your Peers
Family members with persistent cough suggests possible pertussis	✓	82%
Honking cough absent during sleep suggests habit cough	✓	87%
It may be a first presentation of cough variant asthma		29%
Post-nasal drip can prolong the cough of a viral URTI		15%
Post-viral cough is the most frequent diagnosis	✓	82%

GP Panel

The GP panel noted that chronic cough can be difficult to manage in children. Although neither cough suppressant nor expectorants are more effective than placebo, most children with ongoing cough will already be taking some sort of cough medicine bought over the counter.

The use of cough suppressants or expectorants is not recommended, especially for chronic cough, as it may distract from identifying the need for more important therapies. Whilst on this issue the panel discussed when to suspect, investigate and treat pertussis. We will ask our key adviser to comment on this.

Cough variant asthma and post-nasal drip are controversial diagnoses. Recurrent or persistent cough without wheeze is highly unlikely to be any form of asthma and post-nasal drip is not considered to be a cause of chronic cough in children.

4. Select the intervention(s) that are effective in the management of chronic cough in children

	GP Panel	Your Peers
Anti-histamines		2%
Cough suppressants		2%
Expectorants		1%
Menthol inhalations		2%
Smoke avoidance	✓	99%

GP Panel

All respondents recognised the importance of a smoke-free environment for children with chronic cough and the lack of effectiveness of medications.

5. A two year-old boy has a fever of 39°C (electronic thermometer in axilla) as a result of a viral upper respiratory infection. Select the true statement(s) in this scenario from the list below.

	GP Panel	Your Peers
Febrile convulsions do not cause brain damage	✓	78%
Paracetamol reduces chances of febrile convulsions		11%
Rectal thermometer would give more useful result		4%
Reducing fever reduces chances of febrile convulsions		38%
Written handout is likely to improve management at home	✓	93%

GP Panel

The panel discussed the role of antipyretic medications, such as ibuprofen and paracetamol, in the management of fever. They are certainly effective at reducing fever and the discomfort that may be associated with it, but do not reduce the risk of febrile convulsions. The panel asked if our key advisers could say why this is.

6. Select the true statement(s) about paracetamol use in children.

	GP Panel	Your Peers
Can be alternated with ibuprofen for better effect		13%
Obese children should have lower doses than weight suggests	✓	75%
Reduces discomfort caused by fever	✓	94%
Reduces the chances of febrile convulsions		14%
Useful in pain following injury	✓	95%

GP Panel

Ibuprofen is frequently bought over the counter by parents. Single doses are safe and effective but there is less evidence around ongoing use or combination with paracetamol. The adverse effect profile of this use of ibuprofen will become clearer over time. One of our panel has had a 16-year-old develop acute renal failure with ibuprofen use.

Paracetamol has been used for a long time and the effects of over dosage are well known. The dose of paracetamol is dependent on lean body weight, so obese children and those who are malnourished, need dose adjustments to allow for this. As repeated from the previous question, ant-pyretic medications do not reduce the risk of febrile convulsions.

7. A four-year-old child presents with acute diarrhoea. Select the feature(s) that suggest a bacterial aetiology.

	GP Panel	Your Peers
Abdominal pain	+/-	79%
Appears to be related to food source	✓	73%
Blood or mucus in the stools	✓	99%
High grade fever	✓	89%
Outbreak in local pre-school		11%

GP Panel

The panel would order stool cultures for children with acute diarrhoea with blood or mucus in the faeces, high-grade fever or when a food source is suspected. Abdominal pain may raise the suspicion of a bacterial cause, but on its own would not be a trigger for stool culture, as the panel felt mild pain was a fairly common accompaniment of any cause of diarrhoea.

Abdominal pain may be an indicator of other problems, such as appendicitis, which can be very difficult to diagnose in pre-schoolers.

8. Select the correct statement(s) about the management of gastroenteritis in children

	GP Panel	Your Peers
Antidiarrhoeals or antiemetics are often useful		1%
Cow's milk should not be used for rehydration in children		15%
Oral rehydration is given at a rate of 5 mL per minute	✓	90%
Skin turgidity is a good indicator of level of dehydration		51%
Vomiting is a contraindication to oral rehydration		1%

GP Panel

The panel pointed out that modern teaspoons usually have a capacity of less than 5 ml and cannot be used for the measurement of medicines or fluid administration.

Skin turgidity may be an indicator of dehydration but is not good enough to indicate its level.

Sometimes it is necessary to use fluids that a child is familiar with for fluid replacement. Cow's milk can be used undiluted for children over one year of age.