

Churchill Medical Centre

**Doing ground breaking stuff
no-one's done before**



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Churchill Medical Centre

Implementing evidence from 50 years ago

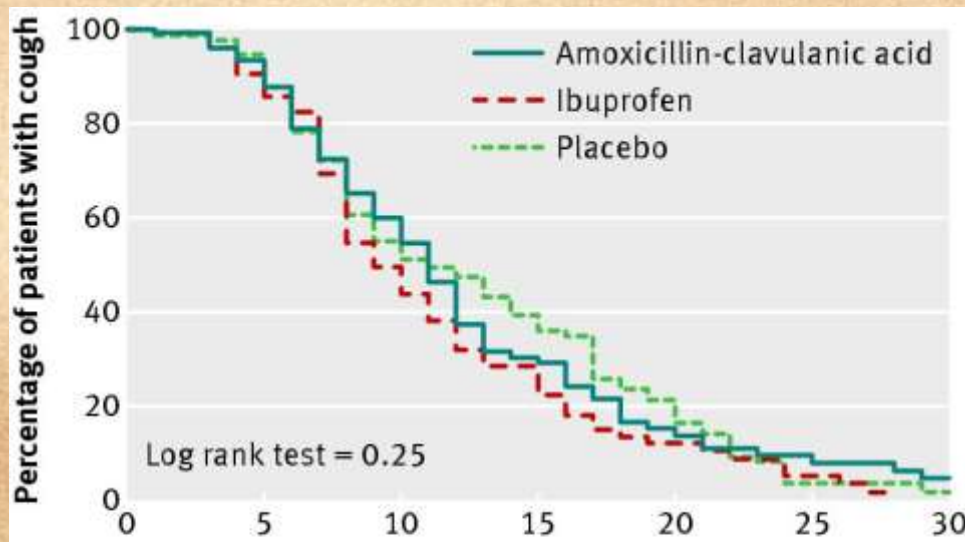
Elmes, PC et al *Value of ampicillin in the hospital treatment of exacerbations of chronic bronchitis.*

BMJ 11/1965;2(5467):904-8



CARDIFF 2013

- Cardiff 2013
- Llor et al *Efficacy of anti-inflammatory or antibiotic treatment in patients with non-complicated acute bronchitis and discoloured sputum: randomised placebo controlled trial* BMJ 2013;347:f5762
- Antibiotics don't work for cough even with purulent sputum – don't use them.



CARDIFF 2013

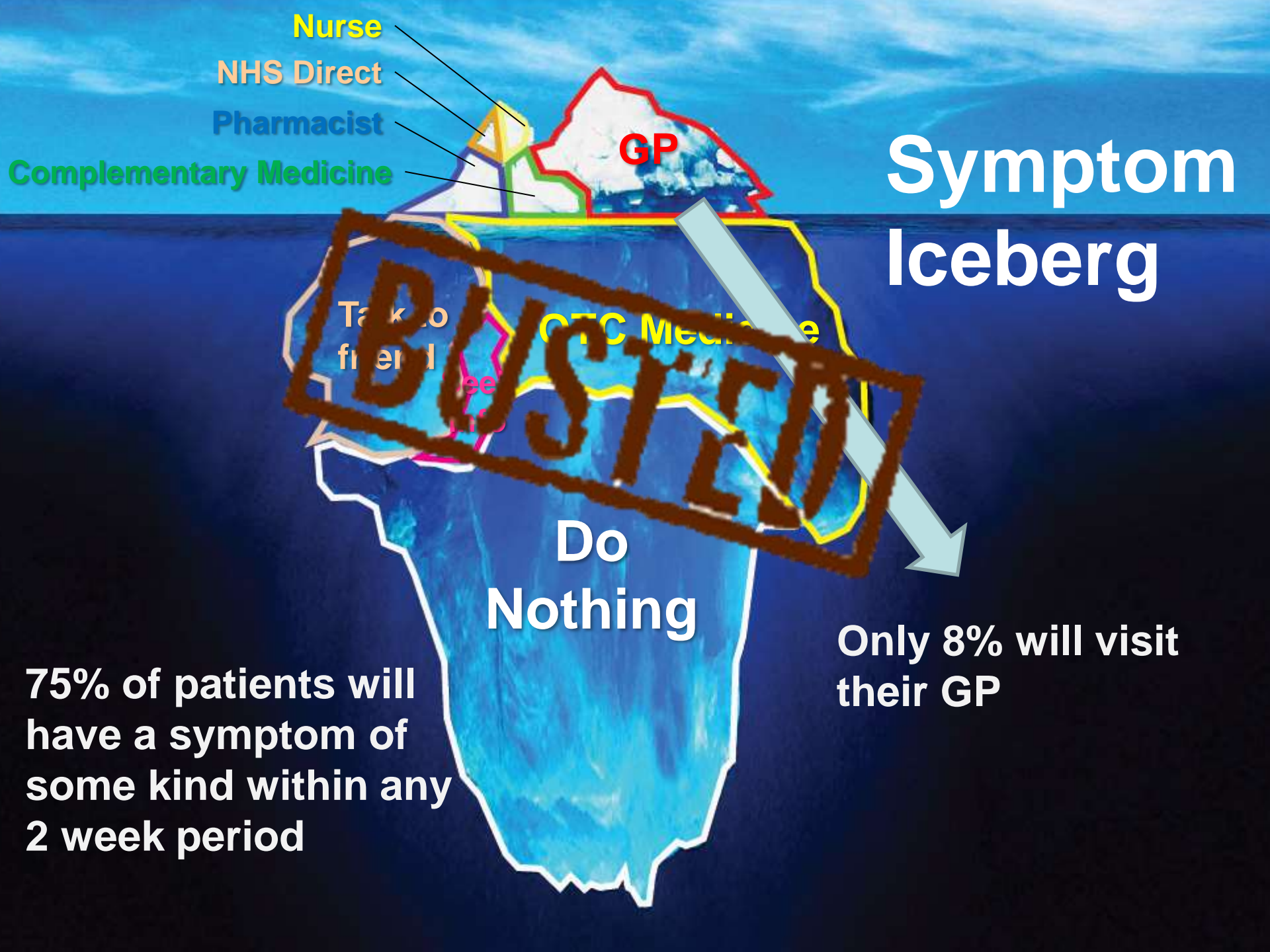
- It doesn't matter whether it's viral or bacterial – they still don't work.



2012 MYTHBUSTING

Myths

- Everyone goes to their GP for the slightest symptom
- General practice is not very evidence based so it's dangerous to refuse antibiotics
- It takes too long to encourage self care



Symptom Iceberg

GP

Nurse

NHS Direct

Pharmacist

Complementary Medicine

Talk to friend
see no

OTC Medicine

BUSTED

Do
Nothing

Only 8% will visit
their GP

75% of patients will
have a symptom of
some kind within any
2 week period

What percentage of GP interventions are evidence based?



1963 Forsyth – half a century ago, 20% evidence based prescriptions

1995 Gill, - 81% interventions in GP evidence based

Tweetment

- 90% of coughs last up to 3 weeks and will not be helped by antibiotics unless you are elderly, very ill or have another health condition
- 138 characters





Talking and walking

BITE-SIZED CHALLENGE FOR WINTER 2012

Bite sized challenge for this winter

- Multidisciplinary team – everyone involved
- Start with respiratory illnesses
- Consistent messages
- Evidence based literature
- Positive messages
- Delayed/no prescribing strategy

NICE 2008

Everyone needs to know:

- **acute otitis media: 4 days**
- **Acute sore throat/acute pharyngitis: 1 week**
- **common cold: 1½ weeks**
- **acute rhinosinusitis: 2½ weeks**
- **acute cough/acute bronchitis: 3 weeks**

Cough – simply the evidence

1. 90% of coughs last up to three weeks (whether or not treated with antibiotics or chest signs present)
(Cochrane)
2. The same number reattend even if given antibiotics
(Cochrane)
3. Delayed or no prescribing strategy if not at an increased risk of developing complications (NICE)
4. Antibiotic may sometimes be given if
 - suggestion of complications or
 - at risk of complications elderly, very ill, have comorbidities and or significant history (NICE)

Evidence based advice on RTIs

NORMAL DURATION OF RTIs

- Otitis media: 4 days
- Sore throat/pharyngitis/tonsillitis: 1 week
- Common cold: 1 ½ weeks
- Acute rhinosinusitis: 2 ½ weeks
- Cough: 3 weeks

NB: CHILDREN UNDER 5 WITH FEVER

- 5 days or more of fever need to be seen: AMBER risk
- 0-3 months: temp over 38 or 3-6 months over 39 need to be seen within 2 hours: RED risk

ACUTE OTITIS MEDIA

Ear infections are very common in young children; last 4 days; painkillers main treatment unless with a discharge or under 2 years, both ears.

- 3/4 of all children have had an ear infection by age 2
- Commonest between 3-18 months
- Not unusual to have up to 3 attacks a year
- Will usually last 4 days

Nice recommends **ONLY** consider antibiotics if:

There is a discharge, or under 2 with infection in both ears

When to seek advice

- High temp not coming down
- New discharge
- Vomiting
- Dizziness
- Floppy
- Lethargy
- Severely unwell
- Irritable
- Unwell and still not clearing after 2-3 days

COUGH

- 90% cough last up to 3 weeks, whether or not treated with antibiotics even if chest signs present.

When to seek advice

- Getting worse
- Coughing up blood
- Cough lasts for more than three to four weeks.
- Develop chest and/or shoulder pain.
- Difficult breathing
- Losing weight over a period of six weeks or more
- Voice becomes hoarse.
- Ends of fingers take on a 'club-like' shape.
- New swellings in the neck or above the collar bones.

DELAYED PRESCRIBING OR NO PRESCRIBING STRATEGY

if not at risk of complications:

- Elderly
- Very ill
- Co-morbidities e.g. COPD
- Significant history

SORE THROAT

- 90% clear within 1 week, antibiotics or not
- Do not give antibiotics unless 3 or more Centor criteria present:

- Tonsillar exudates
- Cervical lymphadenopathy
- History of fever
- Absence of a cough

When to seek advice

- Persistent high temperature for more than three days that does not come down with ibuprofen and/or paracetamol.
- Not getting better or that gets worse – after 4 to 5 days
- Hard to breathe in or your throat feels like it's closing up
- Drooling and difficult to swallow.
- Pain is severe and does not respond to over the counter pain killers.
- Voice becomes muffled.
- Difficult to drink enough fluids and become dehydrated
- Symptoms so bad that they prevent you from functioning normally.
- Immunocompromised (including steroids)

National Institute for Health and Clinical Excellence care pathway for respiratory tract infections

At the first face-to-face contact in primary care, including walk-in centres and emergency departments, offer a clinical assessment, including:

- history (presenting symptoms, use of over-the-counter or self medication, previous medical history, relevant risk factors, relevant comorbidities)
- examination as needed to establish diagnosis.

Address patients' or parents'/carers' concerns and expectations when agreeing the use of the three antibiotic strategies (no prescribing, delayed prescribing and immediate prescribing)

Agree a no antibiotic or delayed antibiotic prescribing strategy for patients with acute otitis media, acute sore throat/pharyngitis/acute tonsillitis, common cold, acute rhinosinusitis or acute cough/acute bronchitis.

However, also consider an immediate prescribing strategy for the following subgroups, depending on the severity of the RTI.

The patient is at risk of developing complications.

No antibiotic prescribing

Offer patients:

- reassurance that antibiotics are not needed immediately because they will make little difference to symptoms and may have side effects, for example, diarrhoea, vomiting and rash
- a clinical review if the RTI worsens or becomes prolonged.

Delayed antibiotic prescribing

Offer patients:

- reassurance that antibiotics are not needed immediately because they will make little difference to symptoms and may have side effects, for example, diarrhoea, vomiting and rash
- advice about using the delayed prescription if symptoms do not settle or get significantly worse
- advice about re-consulting if symptoms get significantly worse despite using the delayed prescription.

The delayed prescription with instructions can either be given to the patient or collected at a later date.

No antibiotic, delayed antibiotic or immediate antibiotic prescribing

Depending on clinical assessment of severity, also consider an immediate prescribing strategy for:

- children younger than 2 years with bilateral acute otitis media
- children with otorrhoea who have acute otitis media
- patients with acute sore throat/acute tonsillitis when three or more Centor criteria¹ are present.

¹ Centor criteria are: presence of tonsillar exudate, tender anterior cervical lymphadenopathy or lymphadenitis, history of fever and an absence of cough.

Immediate antibiotic prescribing or further investigation and/or management

Offer immediate antibiotics or further investigation/management for patients who:

- are systemically very unwell
- have symptoms and signs suggestive of serious illness and/or complications (particularly pneumonia, mastoiditis, peritonsillar abscess, peritonsillar cellulitis, intraorbital or intracranial complications)
- are at high risk of serious complications because of pre-existing comorbidity. This includes patients with significant heart, lung, renal, liver or neuromuscular disease, immunosuppression, cystic fibrosis, and young children who were born prematurely.
- are older than 65 years with acute cough and two or more of the following, or older than 80 years with acute cough and one or more of the following:
 - hospitalisation in previous year
 - type 1 or type 2 diabetes
 - history of congestive heart failure
 - current use of oral glucocorticoids.

Offer all patients:

- advice about the usual natural history of the illness and average total illness length:
 - ♦ acute otitis media: 4 days
 - ♦ acute sore throat/acute pharyngitis/acute tonsillitis: 1 week
 - ♦ common cold: 1½ weeks
 - ♦ acute rhinosinusitis: 2½ weeks
 - ♦ acute cough/acute bronchitis: 3 weeks
- advice about managing symptoms including fever (particularly analgesics and antipyretics). For information about fever in children younger than 5 years, refer to 'Feverish illness in children' (NICE clinical guideline 47).

XXXX: 'Home treatment is the best treatment' campaign

At XXXX we are starting a campaign to make sure people are aware that they can treat themselves and their children effectively and safely for most of the coughs, colds, sore throats and earaches they get and that they do not need antibiotics.

Why are we doing this?

Most of you will be aware that antibiotics don't work for most coughs, colds, sore throats and earaches and there has been a big story about this in the news recently. Despite this, people still come in regularly expecting treatment when there is nothing we can do. ~~What is worse, giving unnecessary antibiotics~~ increases the risk of bacteria developing that are resistant to them so they won't work when they are really needed. This campaign is intended to empower patients to treat themselves for conditions that get better anyway and that we can't treat any better than they can.

One surgery had around 300 appointments for these conditions in October 2012. Of these, 100 received antibiotics. The other 200 did not need to attend and it is unlikely that many of the 100 had any great benefit from the antibiotics and were at risk of side effects from them.

What will we be doing?

We will be encouraging all patients who attend with what we call 'respiratory tract infections' to treat themselves and their children rather than coming to see us, although we will not be turning patients away, and we won't be calling these 'minor' illnesses as they don't feel minor!

We have prepared a laminated sheet for doctors and nurses giving a brief summary of the evidence and short messages to give. We have also used the information given in the national Self Care Forum's leaflets to prepare single advice sheets on Coughs and Sore Throats and prepared one on Ear infections which we will be giving to patients.

Delayed prescriptions

Some of our patients have come to believe they need an antibiotic. Most are quite happy not to have them, but for the ~~small number who become~~ distressed when told an antibiotic is not required, we will be giving a 'delayed' antibiotic. A prescription will be given and the patient told they do not need it but that if the patient's condition becomes more severe, they can take it. We know that only a third will then be taken. Once patients are aware that there is nothing we can do, they are less likely to come back next time for another fruitless visit.

Dr Pete Smith prepared a talk for the Self Care Forum on this subject. You can see The PowerPoint presentation and copies of the advice sheets and laminated sheets on XXXX.

Our patients are usually very sensible and we have had very few who have complained, but views about antibiotics can be surprisingly strongly held, particularly when their previous doctor gave a prescription rather than explaining that they are not necessary. Please speak to XXXX if you want to know more.

Home care is best

**Most common
illnesses don't need
antibiotics**

**This is
how long
they may last**

| | |
|---------------------|----------|
| Ear infection | 4 days |
| Sore throat | 1 week |
| Common cold | 1½ weeks |
| Sinusitis | 2½ weeks |
| Cough or bronchitis | 3 weeks |

**Your local pharmacist can recommend
medication to help ease symptoms**



RESULTS

Stats pre-campaign

| October 2012 | Antibiotics Given | Antibiotics Not Given | Total | Percentage given antibiotic |
|-----------------|-------------------|-----------------------|-------|-----------------------------|
| Cough | 78 | 65 | 143 | 54.5 |
| URTI | 60 | 124 | 184 | 32.6 |
| OM | 0 | 0 | 0 | 0.0 |
| Otalgia | 3 | 5 | 8 | 37.5 |
| Temp symp | 7 | 6 | 13 | 53.8 |
| Sore throat | 0 | 1 | 1 | 0.0 |
| Viral infection | 0 | 6 | 6 | 0.0 |
| | 148 | 207 | 355 | 41.7 |
| Tonsillitis | 27 | 0 | 27 | 100 |

Stats post-campaign

| January 2013 | Antibiotics Given | Antibiotics Not Given | Total | Percentage given antibiotic |
|-----------------|-------------------|-----------------------|------------|-----------------------------|
| Cough | 55 | 91 | 146 | 37.7 |
| URTI | 40 | 163 | 203 | 19.7 |
| OM | 0 | 0 | 0 | 0 |
| Otalgia | 4 | 16 | 20 | 20.0 |
| Temp symp | 2 | 15 | 17 | 11.8 |
| Sore throat | 1 | 3 | 4 | 25.0 |
| Viral infection | 2 | 9 | 11 | 18.2 |
| | 116 | 322 | 438 | 26.5 |
| Tonsillitis | 35 | 0 | 35 | 100 |

Results – per month

| | Pre | Post | %age reduction | Numbers not receiving unnecessary antibiotics |
|-------------------|------------|------------|----------------|---|
| Cough | 54.5 | 37.7 | 16.9 | 25 |
| URTI | 32.6 | 19.7 | 12.9 | 26 |
| TOTAL URTI | 355 | 438 | 15.2% | 67 |

So what?

Results – per month

15.2% reduction in use of antibiotics

67 people per month avoided antibiotics

804 per year avoid unnecessary antibiotics

50/1,000 pts on practice list will benefit

All on the SCF website

- <http://www.selfcareforum.org/resources/case-studies/>



No excuses!
JUST DO IT!