



Professor Tony Dowell

Professor of Primary
Health Care and
General Practice
University of Otago
Wellington



Associate Professor Nikki Turner

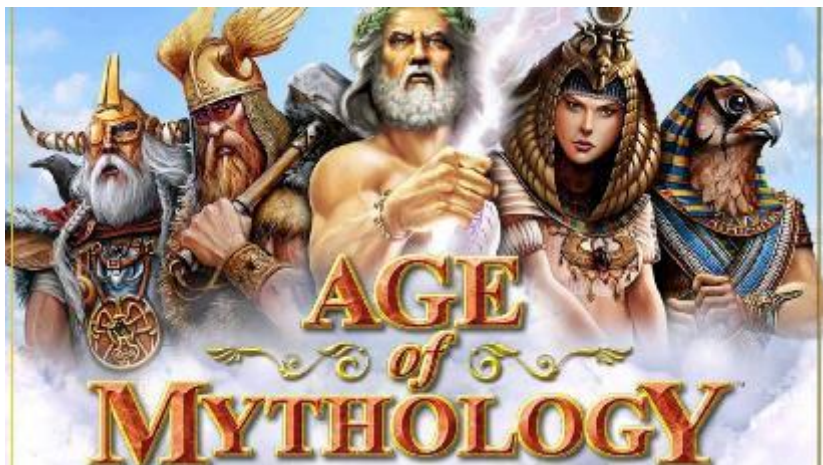
Academic General
Practitioner
University of Auckland
University of Otago
(Wellington Campus)

Sunday, June 11, 2017

11:50 - 12:15 Evidence and Myth in Everyday General Practice



Evidence and Myth in Everyday General Practice



Nikki Turner and Tony Dowell



Today

- Evidence in general practice
 - The gains
 - When it conflicts
 - The limitations
 - When it runs out
 - When we don't use it
 - Doing harm
- Evidence and mythology
- The art of General Practice
- The WORDS
- And who are we?

Our World



Evidence updates our practice

- Lateral epicondylitis: corticosteroid injections

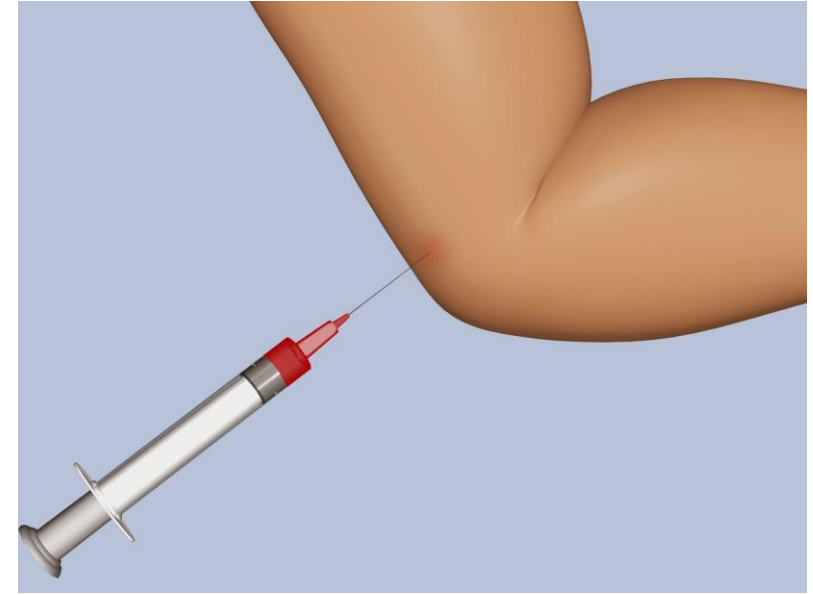


Image: rowingback.com

No long term benefits

“ a well-documented short-term benefit, they appear to have a detrimental effect with longer follow up, such as an increase in recurrent rate”

Elmajee, M. S., & Pillai, A. (2016). Review Article of Corticosteroid Injections Use in Acute and Chronic Lateral Epicondylgia. *An Update of the Currently Available Literature. Orthop Muscular Syst*, 5(205), 2161-0533.

Carayannopoulos, A., Borg-Stein, J., Sokolof, J., Meleger, A., & Rosenberg, D. (2011). Prolotherapy versus corticosteroid injections for the treatment of lateral epicondylitis: a randomized controlled trial. *PM&R*, 3(8), 706-715.

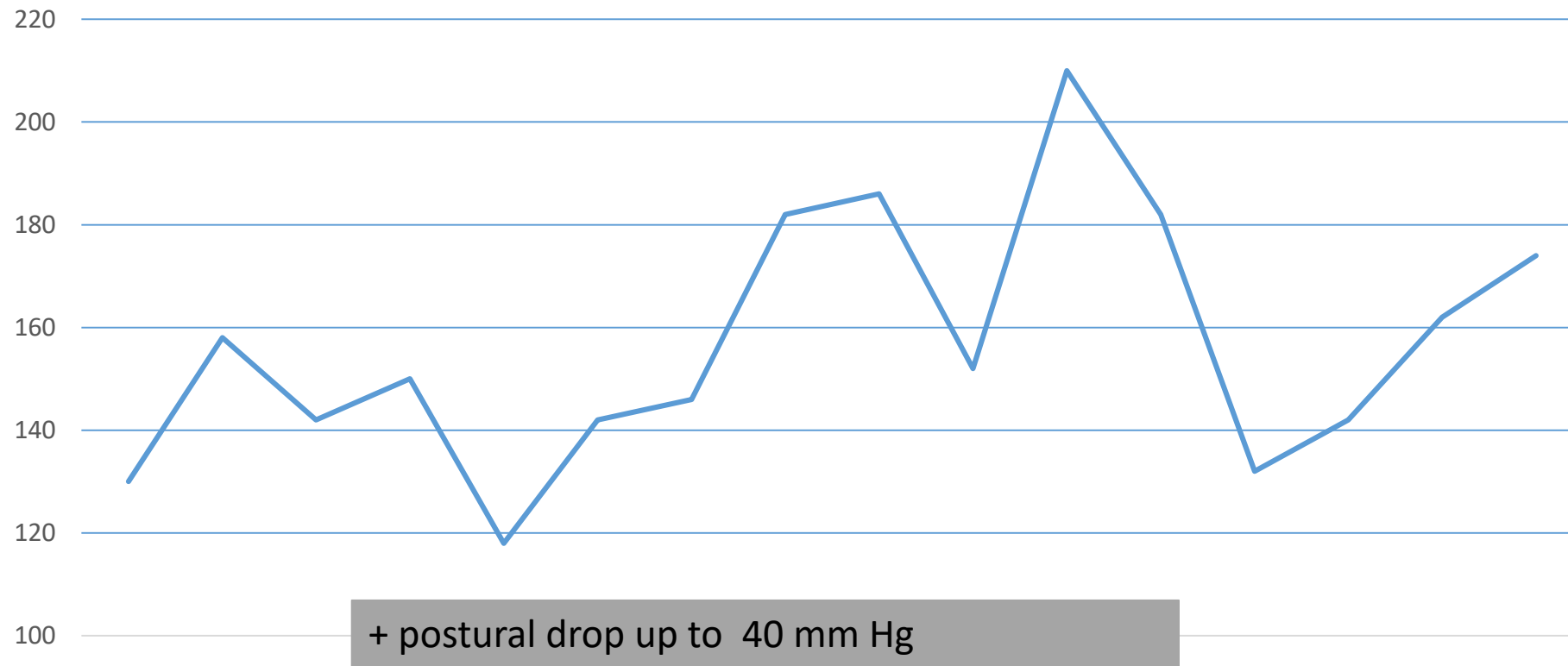
Coombes, B. K., Bisset, L., Brooks, P., Khan, A., & Vicenzino, B. (2013). Effect of corticosteroid injection, physiotherapy, or both on clinical outcomes in patients with unilateral lateral epicondylalgia: a randomized controlled trial. *Jama*, 309(5), 461-469.

But

...the evidence base is often slim

Mrs G, aged 91 yrs

Systolic BP measures: Feb 2016 – Feb 2017



- Do frail very old hypertensives get benefits from antihypertensive treatment?
- Is the benefit similar or different in non-frail and frail individuals?
- Should the BP threshold at which to start treatment be higher as recently recommended by guidelines?
- Which are the BP targets that maximize protection in frail very old patients, without posing a risk to their safety?
- What is the definition of 'frail'?

Mrs G

- it is not just her hypertension

most important active issues

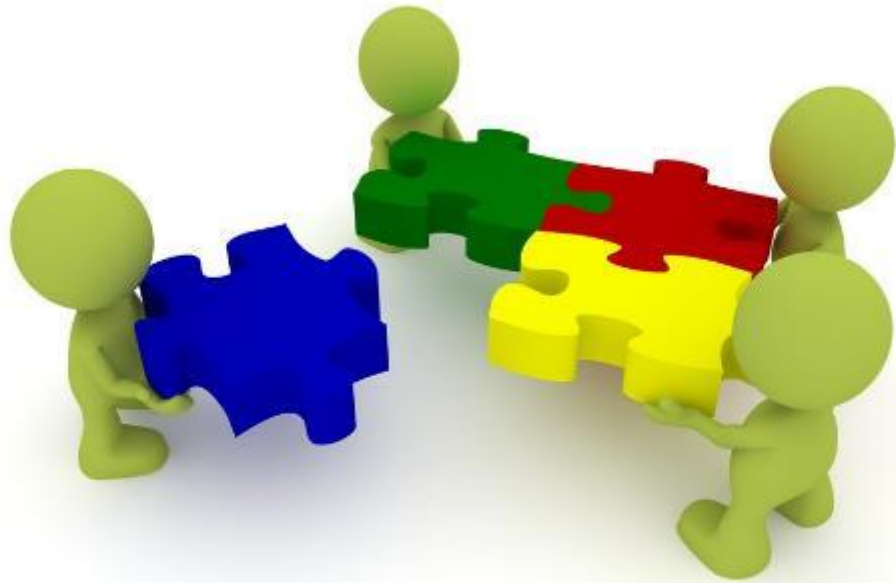
- Hypertension with postural hypotension
- CVA (haemorrhagic) Jan 2017
- Hypothyroid
- Cognitive impairment (MOCA 14/30, CT severe frontal atrophy)
- Tachy-bradycardia syndrome – symptomatic palpitations
- Intermittent AF
- Depression /anxiety
- PMR
- Osteoporosis
- Frozen shoulder
- Back and neck severe chronic pain, probably mostly OA
- Dysphagia – cause unknown
- COPD – mild
- Nausea – cause unknown
- Recurrent falls
- Lives alone

Has had 8 admissions in the past 6 months

Competing evidence-base

- Treating her BP more
 - Anticoagulate her for the AF
 - Better pain relief for the chronic pain
 - Trialling a low dose antidepressant for her anxious depression
 - Increasing B Blocker to control the symptomatic palpitations
-
- Reducing pain medication to mitigate cognitive impairment
 - Reducing the BP and pain medications affecting the postural hypotension
 - Weaning off as many meds as possible

? Putting the pieces together



Living with multimorbidities

The main healthcare priority of the patient was not represented in the top three priorities of their physician

Drennan, V., Walters, K., Lenihan, P., Cohen, S., Myerson, S., & Iliffe, S. (2007). Priorities in identifying unmet need in older people attending general practice: a nominal group technique study. *Family Practice*, 24(5), 454-460.

Zulman, D. M., Kerr, E. A., Hofer, T. P., Heisler, M., & Zikmund-Fisher, B. J. (2010). Patient-provider concordance in the prioritization of health conditions among hypertensive diabetes patients. *Journal of general internal medicine*, 25(5), 408-414.

Patient perspectives

- Support from family and friends
- Healthcare system
 - Making and attending/travelling to appointments
 - Time in consults
- Cultural needs e.g. spiritual
- Silos in health services dealing with single issues
 - Wanting a professional single point of contact
- Managing multiple medications
- Fear of side effects

Signal L et al *A walking stick in one hand and a chainsaw in the other: patients' perspectives of living with multimorbidity* NZMJ 12 May 2017

- *my wife had a couple of complaints and she said 'oh, we're going to the doctor today. We'll talk to him about it.' And she started to talk to him: she said there's this and that. And he said, 'I'm sorry you've only got fifteen minutes.'*
- *Oh when I go to the GP, he goes 'oh you're seeing the asthma clinic next week. Tell them what's going on'. Or I see the asthma clinic, [they say] 'when are you seeing rheumatoid next?'*
- *You've got the diabetes who are worried about the sugar, but they're not too concerned about the fat intake. And then you have the [other] dietitian who comes in totally different*

Filling some of the gaps in our evidence-base

Childhood morbidity

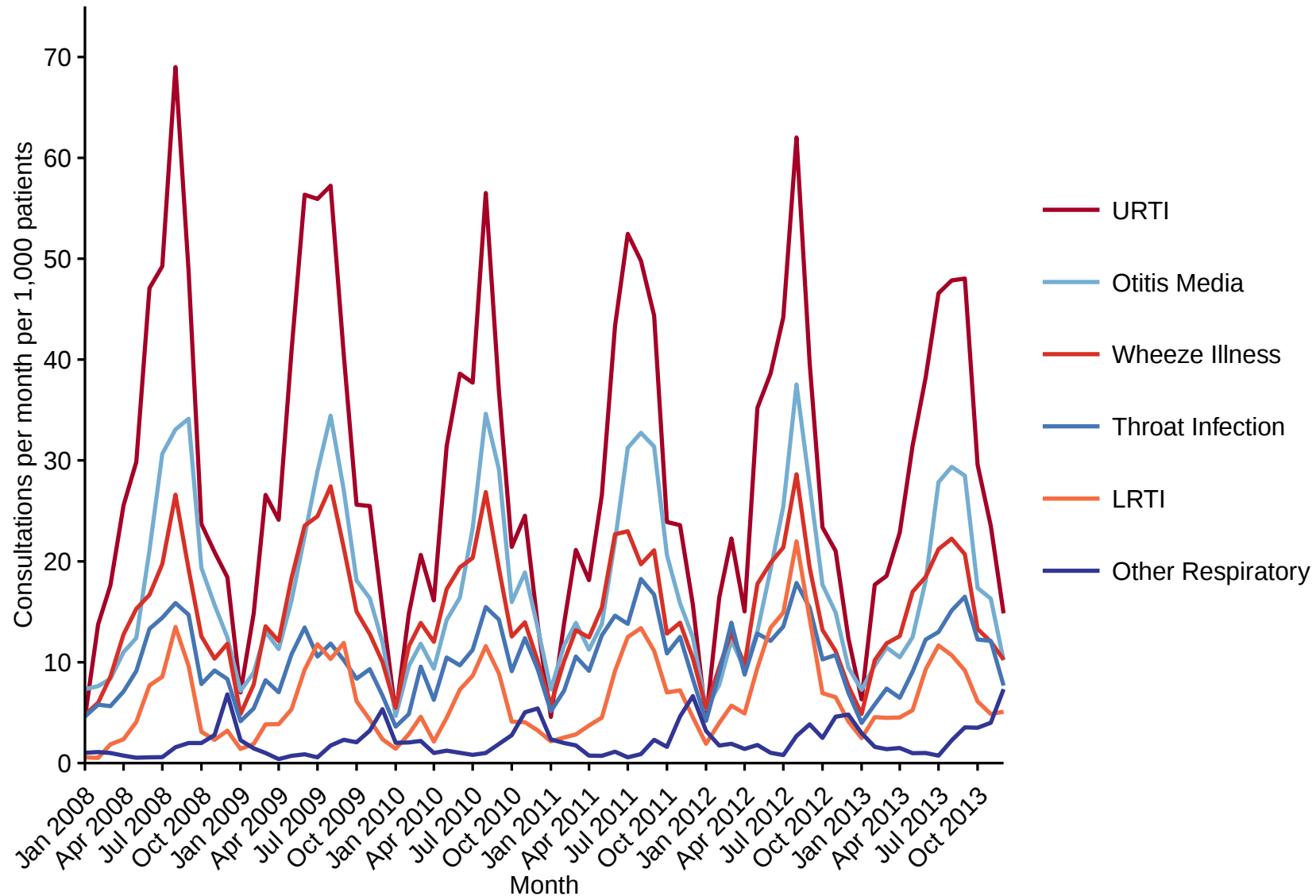
- High workload (0-5 years 6 + visits / yr)
- Unclear how much actual illness or morbidity
- Much illness acute and self limiting
- Not coded
- General Practice and Primary care contribution unrecognised
- Kids Ambulatory Sensitive Hospitalisations = a lot of hospital admissions



Ambulatory Sensitive Hospitalisations in Children aged 0–4 Years by Primary Hospital Diagnosis

- Gastroenteritis - 23.0%
- Upper Respiratory Tract Infections - 16.8%
- Asthma - 16.7 %
- Dental Conditions - 14.3%
- Bacterial/Non-Viral Pneumonia - 11.8%
- Skin Infections - 8.35%
- Otitis Media - 3.02 %

Service utilisation of childhood respiratory illness



When and how do we to use or not use the
“evidence”

Do we know the evidence?

When it is too hard?

NZ GP experiences with NSAID use

McDonald et al GP's views and experiences of prescribing non-steroidal anti-inflammatory drugs: A qualitative study BJGP Open 31 May 2017

Many GPs are uncertain about specific risk of their magnitude and how to apply their knowledge to the complexity of a particular patient interaction

- NSAID prescribing is a complex balance between pragmatism and potential adverse events
- Given the costs of morbidity, hospitalisation, and patient demand there is an urgent need to secure a more detailed evidence base and develop practical pathways to support safer prescribing

- Some issues are hard
 - Evidence base continues to grow
 - Have we kept pace with the evidence base?

How do we keep pace with the evidence-base
- small tools and learning

***General practice moves incrementally, adopting
partial evidence-base***

'Evidence' not matching the patient's world

GP consultation. – Encouraging exercise ???

PT: um me I've got an older sister to look after that's had a stroke

GP: so you take her for a walk twice a week?

PT: so ((inhales)) you know

PT: I work with preschoolers I'm walking around all day

GP: it's not good enough

PT: it's not good enough? oh cripes

GP: you need to be working up a sweat

PT: oh oh

GP: every day

PT: oh crikeys

The bridge from evidence to mythology



Myths and legends for a new age

CASHEWS are a
Natural
Anti-Depressant

2 handfuls of cashews is
the *therapeutic equivalent*
of a prescription dose of
PROZAC



YOU ARE THE CAUSE OF HAPPINESS



THE ONLY PERSON WHO CAN MAKE YOU **HAPPY** OR **UNHAPPY**
IN THIS WORLD IS **'You'**.
YOU ALONE HAVE THE ABILITY TO CREATE HAPPINESS FOR YOURSELF.

stepintomygreenworld.com

STOP HEART ATTACK WITH CAYENNE PEPPER



Dr. John Christopher: "In 35 years of practice I have never on house calls lost one heart attack patient. The reason is if they are still breathing -- I pour 1 tsp of cayenne in a cup of hot water, and within minutes they are up and around."

NOTE:

First the Cayenne pepper must be at least 90,000 heat units or 90,000(H.U) to be able to stop a heart.

• If the cayenne is at least 90,000 H.U. and the person is still conscious, the recommendation is to mix 1 tsp of cayenne powder in a glass of warm water, and give it to the person to drink.

• If the person is unconscious then the recommendation is to use a cayenne extract (at least 90,000 H.U), and put 2 full droppers underneath their tongue.



facebook.com/stepintomygreenworld pinterest.com/mygreenworld

NATURAL TREATMENT FOR ARTHRITIS

Planet Ayurveda recommends the following combo pack for the treatment of initial stage of arthritis naturally.....

ANTI-ARTHRITIS PACK - 1



✓ TREATS ARTHRITIS

✓ RELIEVES PAIN & INFLAMMATION

✓ 100% NATURAL

✓ SAFE & EFFECTIVE

✓ NO SIDE EFFECTS



WWW.PLANETAYURVEDA.COM

And we can do harm...



Myths and Legends

- An attack of the Vapours



■ 3つのスチームの切替もワンタッチ。



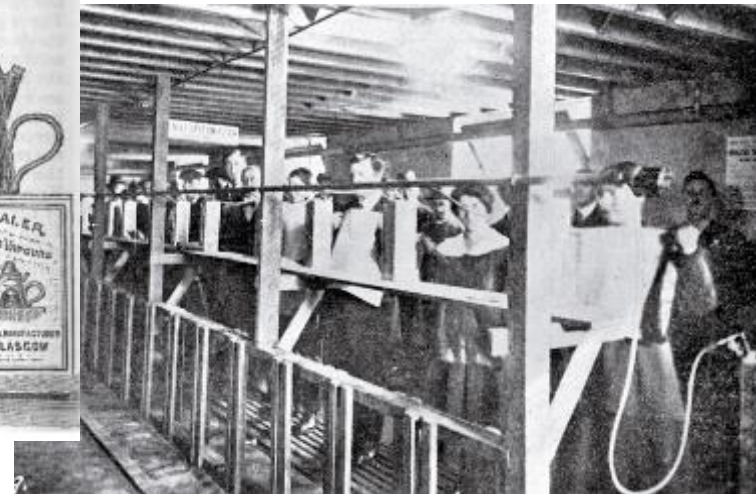
のどイガイガモード
はなムズムズモード
はなづまりモード
のワンタッチ切替え



はなづまり ● のどイガイガ
● はなムズムズ

The advertisement shows a young boy with dark hair using a white steam inhaler. The device has a green nozzle. To the right, there is a list of three modes: 'のどイガイガモード' (Sore Throat Mode), 'はなムズムズモード' (Nose Itchy Mode), and 'はなづまりモード' (Nose Congestion Mode). Below this list is a circular dial with three positions corresponding to these modes. The text 'のワンタッチ切替え' (One-touch switching) is also present.

Historical face validity



And :

- *Steam inhalations have been seen to be tremendously helpful to many people with a wide variety of problems that are affecting their breathing in one way or another. NZ Herbalist*
- NHS direct website recommended that doctors “advise parents to sit in the bathroom with a hot shower running.”

Little, P. et al. (2013). Ibuprofen, paracetamol, and steam for patients with respiratory tract infections in primary care: pragmatic randomised factorial trial. *BMJ*, 347, f6041.

But



+



=



Baartmans, M., et al. (2012). Steam inhalation therapy: severe scalds as an adverse side effect. *British journal of general practice*, 62(600), e473-e477.

Murphy, S. M., et al. (2004). Lesson of the week: Burns caused by steam inhalation for respiratory tract infections in children. *BMJ: British Medical Journal*, 328(7442), 757.

Greally, P., et al (1990). Children with croup presenting with scalds. *BMJ*, 301(6743), 113-113.

Wallis, B. A., et al (2008). Scalds as a result of vapour inhalation therapy in children. *burns*, 34(4), 560-564.

- Although advice to use steam is commonly given in primary, the evidence of effectiveness is limited
- The risks of harm are well documented

Steam inhalations are not recommended in the routine treatment of common cold symptoms until more double-blind RCT trials are conducted.

Singh M. Heated, humidified air for the common cold. Cochrane Library 2004;2:CD001728.

Dowell AC, Turner N. (2016) Closing evidence to practice gaps: an end to an attack of the vapours? Br J Gen Pract 2016; 66 (644): 118-119.

Darwin award



The narrative – evidence or myth ?

Ethical dilemmas in GP households



And the “evidence-based” response

SURVEY:

“Do you think this is an appropriate use of this instrument?”

Poll N = 18

- **Paediatrician 1 = No (but biased as Australian)**
- **Non-medical 15 = NO**
- **Non-medical 1 = YES (Engineer)**
- **Most experienced GP = YES (but biased as male)**
 - **however changed his mind when he realized pragmatically they were useless!**

Back in the real world

Mrs G: What is bothering her the most?

- Hypertension with postural hypotension
- Hypothyroid
- Cognitive impairment (MOCA 14/30, CT 2016 – severe frontal atrophy)
- CVA Jan 2017
- Tachy-bradycardia syndrome
- Intermittent AF
- Depression /anxiety
- PMR
- Osteoporosis
- Frozen shoulder
- Back and neck severe chronic pain, probably mostly OA, ? some PMR
- Dysphagia – cause unknown
- COPD – mild
- Nausea – cause unknown
- Ectropion
- Recurrent falls
- Lives alone

The Art of General Practice

Blending the art of the narrative with the science of evidence

What is bothering her the most?

- Hypertension with postural hypotension
- Hypothyroid
- Cognitive impairment (MOCA 14/30, CT 2016 – severe frontal atrophy)
- CVA Jan 2017
- Tachy-bradycardia syndrome – **symptomatic palpitations**
- Intermittent AF
- Depression /anxiety
- PMR
- Osteoporosis
- Frozen shoulder
- **Back and neck severe chronic pain**, probably mostly OA, ? some PMR
- Dysphagia – cause unknown
- COPD – mild
- Nausea – cause unknown
- Ectropion – **sore eyes**
- Recurrent falls
- Lives alone - **loneliness**

Putting it all together

- Synthesise
- Incorporate
- Combine
- Make whole
- Amalgamate
- Arrange
- Blend
- Harmonise
- Orchestrate
- Unify
- Symphonise



What tools do we have ?



The new face of general practice?

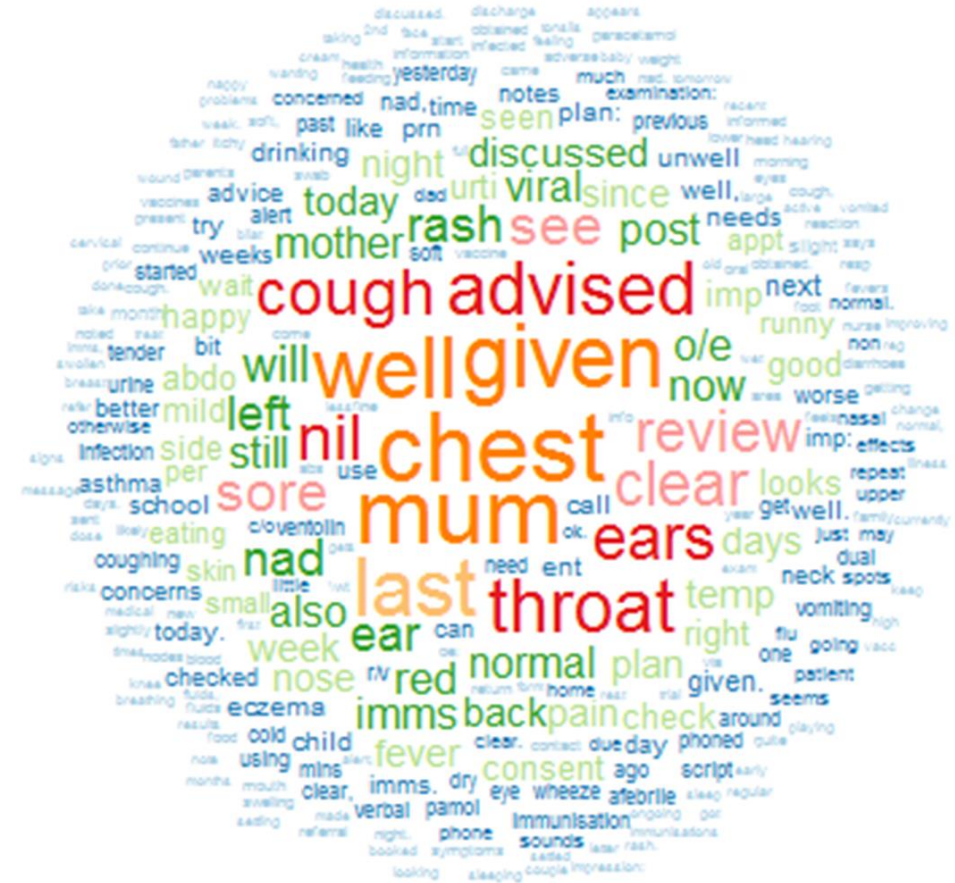
In a world where

- Algorithm driven virtual medicine
- Acute triage
- Health Care Home
- Outsourced LTCM, Psychological Medicine, O and G
- Virtual tech



The power of words

- Therapeutic alliance – up to 50% of therapeutic effect
- Strong contribution to the placebo response



Power of words (1) – Low Back Pain

Uncertainty and Fear → seek more information and understanding.

- Internet and looked to family and friends
- But
 - health care professionals had the strongest influence upon attitudes and beliefs.

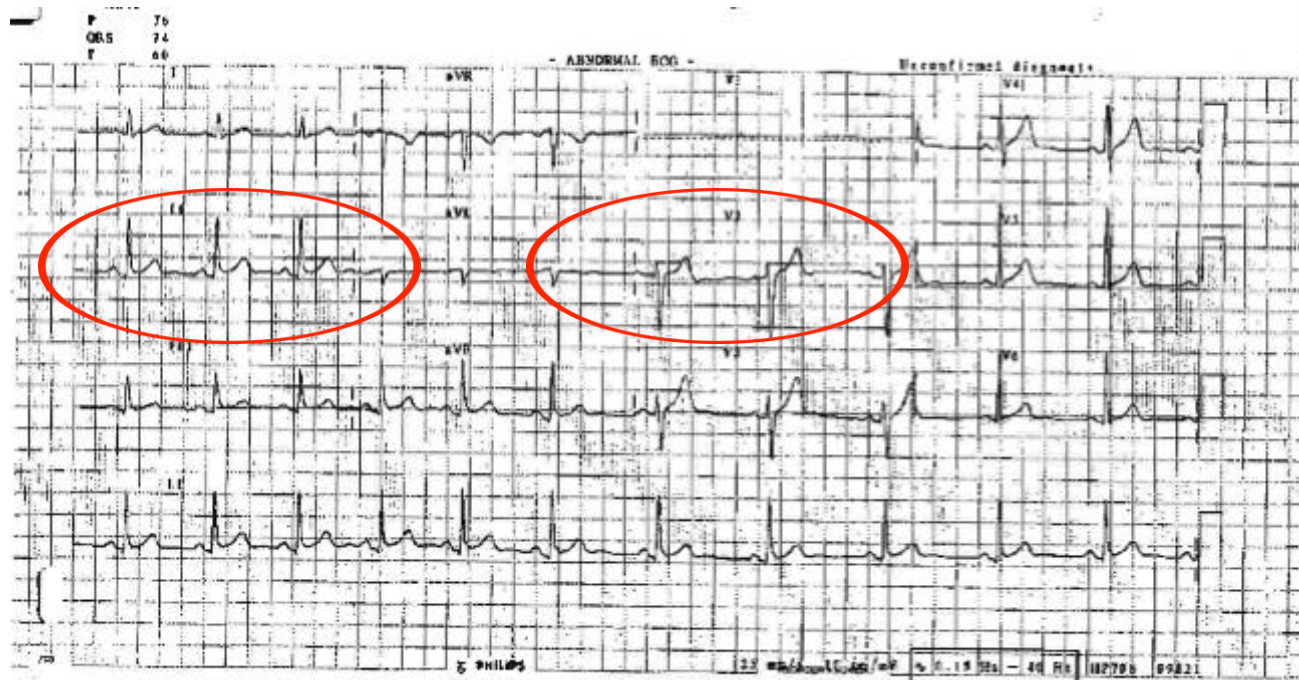
*I injured my back, and I think they described it as...a slipped disc....
Something she'd also said to me, "Unfortunately, because you've done this,
you have a very high chance of doing it again." Now, I connect any pain that I
feel round there to that*

*I was worried that...I would do things [at work] that would further damage
my back.... [The doctor] basically said that I shouldn't do any bending or
lifting. Which is a lot of the job*

GP advice to patients with low back pain

- Patients' understanding of the source and meaning of symptoms
- Prognostic expectations.
- **Continue to influence the beliefs of patients for many years.**
- Many messages interpreted as meaning the back needed to be protected.
- Result in increased vigilance, worry, guilt.
- Clinicians could also provide reassurance.

The power of words (2)



- Fit and well
- Chest pain
- AMC
- GP “I think you’ve had an inferior infarct”
- Mr Dowell – “I don’t think so. I think we’ll wait for the troponin”

The words and conversations

Hospital Reg

- I'm not really sure what to do about this – I'm usually rheumatology

Nurse (after monitor had 'flatlined')

- No – you haven't had a cardiac arrest – the battery is flat on this monitor

Taxi driver 0300

- “ You've had a bit of a rough night then”

GP

- “ Well – lets just check the ECG again now – seems fine,”
- “ But how are you feeling - I don't think you should be back at work for a bit”

Do you smoke x 3

General Practice: Humanity in the midst of activity

- The lived stories
- Evidence-base.....+/-
- Blended/mixed/
 - The pieces alongside the whole
 - Blend it into the narrative
- Translating the unknown
- Managing mythology...
- using **WORDS**....

- Evidence?
 - matching to the real world
 - cant keep up
- Time pressure
- Change
 - Technology
 - Modes of communication
 - External expectations
- Professional silos
 - who is in charge
- Gateway / gatekeeper swamping
 - ?GP role
 - legal liability
 - 'holistic care' - who can really know the whole patient?

Words

“I have to cry out here that language is all we have for the delicacy and truth of telling, that words are the sole heroes and heroines Their generosity and forgiveness make one weep.”

Janet Frame – Living in the Maniototo

