

Patient Psychology Research Review™

Making Education Easy

Issue 7 - 2013

In this issue:

- *Use of visual aids to communicate health risks*
- *Public figure announcements about cancer*
- *Memory tests make old people feel older*
- *Improving medication adherence after stroke*
- *Opting in vs opting out*
- *Chronic pain is not fair*
- *Patients' views of the value of CCTA*
- *The nocebo effect*
- *Don't worry, be sad!*



Welcome to the latest issue of Patient Psychology Research Review.

Highlights this month include an interesting study of the use of visual aids to communicate health-relevant risk information to vulnerable people, a fascinating report of the impact that cancer announcements by celebrities have on the general population, and a study showing that memory tests can make old people feel older. We also report a simple strategy for improving medication adherence in stroke survivors, evaluate the merits of an opt-in versus opt-out strategy for repeat colonoscopy tests, and discuss perceived injustice in chronic pain sufferers.

We hope you enjoy the selected studies and wish you all the best for the festive season.

Kind regards

Keith Petrie

keithpetrie@researchreview.co.nz

Communicating health risks with visual aids

Authors: Garcia-Retamero R & Cokely E

Summary: Some individuals lack basic numeracy skills. This limits their ability to accurately interpret risk information and make sound decisions. Visual aids are simple graphical representations of numerical expressions of probability that are useful for communicating health-relevant risk information. This article reviewed a collection of studies investigating the benefits of visual aids for communicating health risks to vulnerable people. Individuals varied in abilities, ages, risk characteristics, and cultural backgrounds. The studies showed that well-designed visual aids can be highly effective tools for improving decision making and reducing risky behaviour in vulnerable people who typically have problems understanding numerical information about health risks.

Comment: More attention is rightly being paid to the way patients understand the risks and benefits of medical treatments. An important limitation in understanding is the public's poor understanding of numeracy and basic maths. This paper provides a review of how visual aids are being used to convey health risk information and provides recommended reading for those practitioners interested in this area. The growth of mobile technology offers considerable opportunity to present personalised information visually to patients in new ways that aid their health decisions. Understanding risks and benefits are also an important part of health behaviour change but are rarely enough by themselves to bring about change.

Reference: *Curr Dir Psychol Sci* 2013;22(5):392-399

[Abstract](#)

[CLICK HERE](#)

to read previous issues of
Patient Psychology Research Review



Atlantis Healthcare

Change for good.

We drive **positive**, long term **behaviour change** in patients - **supporting** them to take their medication **as prescribed**, and practice healthier behaviours.

The Result

- Better outcomes & quality of life for patients
- Reduced downstream healthcare costs

For more information contact

enquirynz@atlantishealthcare.com



Public figure announcements about cancer and opportunities for cancer communication: a review and research agenda

Authors: Noar S et al.

Summary: This review evaluated the impact of public figure cancer announcements on cancer-oriented outcomes. 19 studies that examined 11 public figures were reviewed. The most commonly studied celebrities were Jade Goody (a UK reality television star who was diagnosed with cervical cancer in 2008 and died in 2009), Kylie Minogue (an Australian/British singer-songwriter who was diagnosed with breast cancer in 2005) former First Lady Nancy Reagan (who had breast cancer surgery in 1987 while she was First Lady) and Steve Jobs (CEO of Apple, Inc., who was diagnosed with pancreatic cancer in 2003 and died from the disease in 2011). The most common cancers studied were breast (53%), cervical (21%), and pancreatic (21%) cancer. Results indicated that cancer announcements from public figures had meaningful, albeit short-term effects on behavioural outcomes, media coverage, information seeking, cancer incidence, and interpersonal communication.

Comment: This interesting paper looks at the effect of publicity around well-known figures' cancer on outcomes such as screening behaviour, information seeking and treatment choices. The media coverage around public figures' experience with cancer can have dramatic short-term effect, particularly around information seeking and screening. For example, in the month after Kylie Minogue's breast cancer diagnosis, there was a 61% increase in referrals to a UK hospital's breast clinic. And in Australia, rates of breast imaging and breast biopsy increased for 6 months following Minogue's diagnosis. Questions remain about which types of celebrities create the most effect and which groups in the population are most influenced. Overall, the effect of cancer in celebrities can have a powerful effect on screening and health behaviour.

Reference: *Health Communication* 2013;1-17

[Abstract](#)

Aging 5 years in 5 minutes: the effect of taking a memory test on older adults' subjective age

Authors: Hughes M et al.

Summary: This series of studies was designed to test the hypothesis that participating in a standard memory experiment would subjectively age older adults. In each study, subjective age was assessed at baseline and after participating in or being given instructions to participate in a memory experiment. Study 1 showed that older adults felt older after taking a standard neuropsychological screening test and participating in a free-recall experiment than they felt at baseline. Study 2 showed that the effect was selective to older adults. Study 3 showed that the subjective-aging effect was specific to memory (a vocabulary test did not have the same impact). Study 4 showed that simply expecting to take a memory test subjectively aged older adults. In conclusion, being in a memory-testing context affects older adults' self-perception by making them feel older.

Comment: This paper tested whether participating in a memory test would "age" older adults by presumably making their difficulties in cognitive tasks more salient to them. Interestingly, the average age of participants in the study was 75 years but on average they reported feeling 58 years old, which increased by 5 years after the neuropsychological task. In fact, the researchers demonstrated that just the process of giving instructions to the memory task made participants feel older. This suggests that the use of memory tasks in older adults may cause at least short-term changes in perceptions of the self and vitality.

Reference: *Psychol Sci* 2013;24(12):2481-2488

[Abstract](#)

Improving adherence to medication in stroke survivors

Authors: O'Carroll R et al.

Summary: This pilot study evaluated the use of a brief personalised intervention to improve adherence to preventive medication in stroke survivors. 62 stroke survivors were randomised to either a 2-session intervention aimed at increasing adherence via (a) introducing a plan linked to environmental cues to help establish a better medication-taking routine and (b) modifying any mistaken patient beliefs about the medication/stroke, or a control group. The primary outcome was adherence to antihypertensive medication over 3 months measured using an electronic pill bottle. 54 patients completed the study. The intervention resulted in 10% more doses being taken on schedule (97% in the intervention group vs 87% in the control group; $p=0.048$). In conclusion, this simple, brief intervention increased medication adherence in stroke survivors.

Comment: Adherence to medicines in general is poor and in stroke patients it can be particularly problematic. This study shows a positive increase of 10% in doses taken on schedule from a relatively simple two-session intervention in patients who reported poor adherence. The intervention encouraged patients to set up a routine with their medicine and aimed to increase necessity beliefs in patients for taking their medicine to reduce a future stroke. The intervention also addressed concerns patients may have about continued use of their medicine. The results were encouraging in showing an increase in adherence and effects on patients' necessity and concern beliefs from a brief targeted intervention. This simple strategy could easily be applied to other patients groups.

Reference: *Ann Behav Med* 2013;46:358-368

[Abstract](#)

Why Atlantis Healthcare?

130
ADHERENCE
& BEHAVIOUR
CHANGE
PROGRAMMES

53
DISEASE STATES

over **one million**
patients &
healthcare providers
enrolled globally



The experts in
medicines adherence
and behaviour change
solutions

For more information contact enquiry@atlantishealthcare.com

Increasing colonoscopies? A psychological perspective on opting in versus opting out

Authors: Narula T et al.

Summary: This study compared the success of "opt-in" versus "opt-out" strategies for preventive colonoscopy screening. 81 patients aged 60–70 years who had at least one colonoscopy more than 10 years before and were eligible to undergo a repeat colonoscopy were included. Patients in the opt-in group received instructions to call and schedule their colonoscopy appointment, whereas those in the opt-out group were mailed the date and time of an already scheduled appointment. Results showed that 97% of opt-in participants and 78.9% of opt-out participants actually showed up for their colonoscopy appointment (p=0.02). When patients in each group who confirmed their appointment were assessed, only 3% of opt-in patients compared with 21% of opt-out patients were "no-shows" (p=0.03). In conclusion, these findings suggest that that opt-out default systems do not always increase participation in preventive health.

Comment: Generally, an opt-out system, where a person has to opt out in order to avoid doing the desired behaviour, results in dramatically higher rates of preventative health and donation behaviour. For example, organ donor rates are far higher in countries with opt-out than opt-in systems. However, this study showed that using an opt-out system for colonoscopy screening was not as effective as an opt-in condition. It is important to see whether this effect may be generalisable to other conditions that cause higher anxiety or induce specific emotions such as disgust in the targeted population.

Reference: Health Psychology 2013; published online 2 Dec

Abstract

Patience Psychology Research Review

Independent commentary by Professor Keith Petrie



Keith Petrie is Professor of Health Psychology at Auckland University Medical School. Keith Petrie worked as a clinical psychologist in medical settings before taking up a faculty position in Auckland.

For full bio [CLICK HERE](#).

It's not fair: social justice appraisals in the context of chronic pain

Authors: McParland J & Eccleston C

Summary: Despite the relevance of social justice appraisals in patients with chronic pain, published research investigating their implication has only recently begun to emerge. This review of available research found 2 main areas of investigation. One area shows that perceived injustice for pain may be a vulnerability factor that can block adjustment. The second area shows that maintaining some sense of justice in life might protect psychological health in people with chronic pain. The review discussed this research and identified key reactions to perceived injustice in the context of chronic pain. Useful interventions for pain sufferers struggling to cope with perceived injustice were also discussed.

Comment: The common belief in a just world – where people get what they deserve – has the benefit of creating a cognitive illusion of a stable and predictable environment. However, for patients who have a chronic pain condition, the sense of injustice that follows their injury may not be adaptive. The authors of this review paper show perceived injustice is associated with greater pain levels, depression, fear of movement and poor return to work rates, as well as anger directed at health professionals. The authors also provide some recommended readings for those interested in increasing their knowledge of the just world concept and its effect on physical health outcomes.

Reference: Curr Dir Psychol Sci 2013;22(6):484-489

Abstract

Seeing what's happening on the inside: patients' views of the value of diagnostic cardiac computed tomography angiography

Authors: Devcich D et al.

Summary: This study investigated the patient-perceived value of diagnostic cardiac computed tomography angiography (CCTA) testing. 13 non-acute patients attending a heart clinic in New Zealand for diagnostic CCTA were interviewed before and after the receipt of CCTA test results. Data analysis followed a thematic analysis approach applied at each interview time point. Three themes were identified from the pre-diagnostic interviews: patients' expectations that testing would facilitate heart-related understanding; the role of CCTA as an essential requirement for considering drug treatment; and awareness of the importance of heart-healthy behaviours. Four themes were identified from the post-diagnostic interview: positive psychological responses to cardiac diagnosis; perceived value of viewing scan images; the potential impact of testing on health behaviour intentions; and patients' reflections on the procedure. In conclusion, CCTA has the potential to meet knowledge-gaining expectations that patients bring to the clinic and may increase motivation of health-protective behaviours.

Comment: Little is known about how patients make sense of cardiac CT results. This qualitative study by our group in Auckland reports on patients reactions to viewing the scanned images of their heart. The images can have a powerful effect on patients through seeing inside their body and also impact on their health behaviour and decisions to take medication. Patients seem to believe the images make their illness seem more "real" and were useful as a basis for understanding the symptoms of their disease. Using diagnostic images for encouraging health behaviour change is an under-researched area but one with a lot of potential in the health field.

Reference: Brit J Health Psychol 2013; published online 20 Nov

Abstract

Merry Christmas and a healthy, happy 2014!

FROM THE TEAM AT RESEARCH REVIEW



The nocebo effect: patient expectations and medication side effects

Authors: Faasse K & Petrie K

Summary: This review examined how patient expectations influence the reporting of side effects, and discussed the role of the media in influencing symptom complaints. Patient expectations can have a large influence on the side effects they feel after starting treatment with a new medication. Symptoms may be the result of the nocebo effect, whereby the expectation of side effects leads to them being experienced. Side effects may also be due to incorrectly attributing pre-existing or unrelated symptoms to the new treatment. Drs' negative beliefs about a treatment, particularly a generic drug, may further enhance a patient's expectations of adverse effects, and the news media may influence expectations by directing attention towards a health or medication scare. This field of research has implications for both medical professionals and the news media with respect to the information they provide to patients or members of the public about side effects.

Comment: This review of the nocebo effect will be of interest to clinicians and researchers in the health field. The paper shows that just the process of informing patients about side effects can dramatically increase the number of patients who will experience them. The paper uses examples from the Eltroxin health scare in New Zealand, as well as reactions to generic medicines, to illustrate how expectations can shape patients' responses and symptom reporting. The nocebo issue is an important one for medicine as it has implications for adherence and health perceptions in general. It also has implications for the informed consent process. For the media, the portrayal of patient case studies and the way health scares and disasters are reported can strongly influence rates of distress and symptoms.

Reference: *Postgrad Med J* 2013;89:540-546

[Abstract](#)

Don't worry, be sad! On the cognitive, motivational and interpersonal benefits of negative mood

Authors: Forgas J

Summary: This article reviewed recent evidence for the benefits of negative affect for thinking and behaviour. Findings from numerous experiments have shown that negative affect can improve memory, reduce judgmental errors, and improve motivation and interpersonal strategies. A positive affect seems to promote more assimilative, internally focused processing styles, whereas negative affect promotes a more accommodative and externally focused thinking strategy. The review discussed the theoretical relevance of these findings, and the implications of recognising the benefits of negative affect for social thinking and performance in a number of fields.

Comment: Sick of everyone telling you to have a nice day and a happy life? This paper shows that negative mood does have some advantages, in terms of being less prone to errors of judgement, more sensitive to social norms, being less selfish, having an increased concern for others and improved memory. Perhaps most surprising is the study where happy and sad participants were asked to persevere on a difficult task. Those in a negative mood spent more time on the task and had more correct answers. This Forgas paper is a good reminder that the relentless pursuit of positive affect is not always a good thing and that negative affect does have some advantages.

Reference: *Curr Dir Psychol Sci* 2013;22(3):225-232

[Abstract](#)

Privacy Policy: Research Review will record your details on a secure database and will not release them to anyone without your prior approval. Research Review and you have the right to inspect, update or delete your details at any time.

Disclaimer: This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on its merits.

Research Review publications are intended for New Zealand health professionals.

New website now live at www.researchreview.co.nz

The screenshot shows the Research Review website interface. At the top, there is a navigation menu with links for Home, Clinical Area, Expert Writers, Health Jobs, and Links. A search bar is located on the right side. Below the navigation, there is a prominent 'Sign Up here' button with a red background. A message states 'Our web site has been upgraded' and provides instructions for password resets.



Highlights of global medical conferences
Free medical congress highlights. Local opinion on 50+ events. New guidelines, best practice, plenaries and symposia.

The screenshot shows a section of the website titled 'Sample Reviews Available For'. It lists various clinical areas such as 'Dentistry' and 'General Medicine'. There are also links to 'Find Reviews in Your Clinical Area' and 'South GP CME 2013'.

Looking for healthcare jobs?

trademe
JOBS

www.trademe.co.nz/jobs

Subscribe at no cost to any Research Review

NZ health professionals can subscribe to or download previous editions of Research Review publications at

WWW.RESEARCHREVIEW.CO.NZ