

Patient Psychology Research Review™

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Issue 13 - 2015

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Welcome to the latest issue of Patient Psychology Research Review.

Highlights include an interesting report of how the use of text messaging by patients during minor surgery can reduce their requirements for analgesia. This is followed by a study of patients' expectations of the benefits and harms of treatments, screening, and tests (they tend to overestimate the benefits and underestimate the harm), and a report of expressive writing in cancer patients. We also present a brief summary of the effects of divorce on health, and finish with a paper of interest to anyone who has ever phoned a call centre.

We hope you find this issue interesting, and look forward to any feedback you may have.

Kind regards

Keith Petrie

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Text messaging reduces analgesic requirements during surgery

Authors: Guillory J et al.

Summary: This study investigated whether text messaging by patients during surgery reduces their need for supplemental analgesia. 98 patients receiving regional anaesthesia for minor surgeries below the waist were randomly assigned to text message with a companion, text message with a stranger, play a distracting mobile phone game, or receive standard perioperative management. The odds of receiving supplemental analgesia during surgery for patients receiving standard perioperative management were 6.77, 4.39 and 1.96 times those for patients in the text a stranger arm, text a companion arm, and the distraction arm, respectively.

Comment: This study looked at minor surgery patients and examined how text messaging and distraction influenced analgesic use. The interesting finding from the study was that texting reduced analgesic use more than playing a distracting angry birds game. Surprisingly, there was also evidence that texting a stranger reduced pain more than texting with a companion or friend. An analysis of the word use during the texting suggests that this was because stranger exchanges were more positive and focused less on the surgery and presumably the pain so patients were more involved in texting about things other than what was happening to them at the time. In contrast the texts to people the patients knew well focused more on the operations and negative emotion. An interesting application of texting!

Reference: *Pain Med* 2015;16(4):667-72

[Abstract](#)

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Patients' expectations of the benefits and harms of treatments, screening, and tests

Authors: Hoffmann T & Del Mar C

Summary: This systematic review assessed patients' expectations of the benefits and/or harms of treatments, screening, and tests. A search of 4 databases (MEDLINE, Embase, Cumulative Index to Nursing and Allied Health Literature, and PsycINFO) identified 35 studies (n=27,323) that reported patients' estimates of benefit and harms. 14 studies focused on a screening, 15 on treatment, 3 on a test, and 3 on treatment and screening. 22 of the studies assessed only benefit expectations, 10 assessed benefit and harm expectations, and 3 assessed only harm. Results showed that the majority of participants overestimated intervention benefit and underestimated harm.

Comment: This interesting review looked at whether patients accurately estimated the benefits and harms of a range of medical treatments, diagnostic tests or screening. The authors reviewed studies that had looked at this in cancer screening such as breast and bowel cancer screening, medication for preventing cardiovascular disease, medication to reduce hip fracture in osteoporosis, screening tests, in maternal medicine, diagnostic radiological procedures, and in surgery. The reviewers found that patients only rarely had accurate expectations of the benefits and harms of the interventions and most of the time tended to overestimate the benefits of the intervention, screening and diagnostic tests and underestimate their harm. The authors suggest that this bias may be partly derived from clinicians who themselves tend to be overly optimistic about treatments and the whole process may contribute to the growing problem of over-diagnosis and treatment. The media and pharmaceutical industry may also play an important role by over-emphasising the value of medical interventions.

Reference: *JAMA Intern Med* 2015;175(2):274-286
[Abstract](#)

The effect of expressive writing intervention on psychological and physical health outcomes in cancer patients

Authors: Zachariae R & O'Toole M

Summary: This systematic review and meta-analysis evaluated the effectiveness of an expressive writing intervention (EWI) for improving psychological and physical health in cancer patients and survivors. A search of databases and existing reviews for randomised controlled studies published in 1986–2014 that evaluated the effects of EWI on psychological and physical health outcomes identified 16 eligible studies. Meta-analysis of the data showed that EWI had no significant effects on any of the individual or combined psychological, physical, or quality-of-life outcomes. The results were not affected by differences in study characteristics e.g. type of control condition, study setting and cancer type. Results from a subset of studies suggested that participants experiencing low levels of emotional support might be more likely to benefit from EWI.

Comment: The expressive writing paradigm developed by James Pennebaker at the University of Texas has shown benefits in a number of studies for writing about your deepest thoughts and feelings about a traumatic or troubling event. Participants typically write for 15–30 minutes a day over four days and are usually compared in experimental studies with control groups who write about control topics. This writing intervention is one of the most widely evaluated in health psychology and meta-analyses have generally shown benefit in a range of healthy and clinical populations. This systematic review evaluated the value of the intervention for cancer patients by examining 16 randomised controlled trials. The findings of the review overall do not show benefits for expressive writing in cancer patients. One reason to explain the lack of effectiveness could be the fact that most of the cancer studies in the review used home-based writing rather than lab-based writing sessions, as had been used in the majority of previous studies.

Reference: *Psychooncology* 2015; published online Apr 14
[Abstract](#)

Learning from marketing: rapid development of medication messages that engage patients

Authors: Yank V et al.

Summary: This study assessed the use of marketing approaches in a health services environment. Researchers and advertising professionals collaborated to develop advertising-style messages designed to encourage patients with chronic kidney disease to ask providers about recommended medications. The partnership achieved an efficient structure, and cost \$US14,550 over a 4-month period. 11 messages were initially developed. These were then tested in 13 patients and 8 providers to identify the 3 most activating messages. The messages were found to be more motivating if they elicited personal identification with imagery, emotions, active patient role, and message clarity.

Comment: This is a very interesting small study that looks at the synergies of health researchers teaming up with advertisers to create more effective medication messages. In most cases, the worlds of advertising and research are very separate, but with direct to consumer advertising about medication, this opens up the possibility of collaboration to increase the use of effective and inexpensive medicines. According to one study referred to in the paper, 8% of consumers that see a specific medication advertised subsequently request it from their doctor and a large number of doctors (73% according to the paper) prescribe it. The team in this study developed some very effective advertisements for increasing ACE inhibitor use in patients with moderate chronic kidney disease. The approach proved to be relatively inexpensive and effective and maybe it will promote more collaboration between creative advertising staff and researchers.

Reference: *Patient Educ Couns* 2015;98(8):1025-1034
[Abstract](#)

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Effectiveness of motivational interviewing to improve therapeutic adherence in patients over 65 years old with chronic diseases

Authors: Moral R et al.

Summary: This study evaluated the effectiveness of motivational interviewing (MI) for improving medication adherence in older patients (>65 years). 32 healthcare providers and 154 patients were included. Providers were assigned to an experimental group or a control group. Those in the experimental group underwent an MI training programme and review of patient treatments, whereas those in the control group used an 'advice approach'. Medication adherence in their patients was compared after 15 days, 3 months and 6 months. The proportion of patients improving adherence was 7.6% higher in the intervention group than the control group ($p < 0.001$). Therapeutic adherence was higher for patients in the intervention group (odds ratio 2.84), women (0.24) and those with high educational levels (3.93).

Comment: This study looked at the effect of motivational interviewing to improve adherence in older patients having difficulty with adherence and taking more than five medications in a primary care setting. The intervention group followed the motivational interview (RULE) techniques of resisting the righting reflex or giving advice to the patient; understanding the patient's own motivations; listening with empathy; and empowering the patient. In the control group the doctors used information and personal advice. The motivational interviewing intervention had a significant effect on lifting medication adherence. While the study has a number of limitations due to the nature of the sample and setting it was carried out in, the results suggest that motivating patients to change their own health may work better than just providing the usual informational approach.

Reference: *Patient Educ Couns* 2015;98(8):977-83

[Abstract](#)

Divorce and health: beyond individual differences

Authors: Sbarra D et al.

Summary: This article reviewed the association between marital dissolution and health outcomes in adults. Two contrasting findings emerged from the literature: most people do well following marital separation; and marital dissolution increases risk for poor outcomes. Most of the risk for poor outcomes is carried by a minority of people, and research focusing on at-risk populations is beginning to shed light on the reasons why.

Comment: This paper is a very nice brief summary of the effects of divorce on health. Most research points to the fact that the majority of people (80–85%) are resilient and cope quite well after going through a divorce. For the remainder, there is evidence of an increased risk of illness and even early death relative to those still married. Those who are at greater risk of poorer outcome seem to be characterised by poorer emotional health prior to the divorce and higher levels of attachment anxiety. Those higher in attachment anxiety often become preoccupied with why the relationship ended or persistently try and reunite with their ex-partner. Persistent poor sleep 10 weeks after marital separation also seems to be associated with poorer health outcomes. A factor that seems to improve adjustment following divorce is having a greater sense of who you are or what the researchers call self-concept clarity.

Reference: *Curr Dir Psychol Sci* 2015;24(2):109-113

[Abstract](#)

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. His early work in pain clinics and medical wards sparked his interest in the field of health psychology and, in particular, the different ways patients cope with medical symptoms and treatment. His research group also does work on adherence to treatment, psychoimmunology, symptom reporting as well as the placebo and nocebo response.



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Social support and adherence to treatment in hypertensive patients

Authors: Magrin M et al.

Summary: This meta-analysis examined whether social support improves adherence to healthy lifestyle and treatment medication in patients with hypertension. Articles were selected from CINAHL, MEDLINE, PsycINFO, PsycARTICLES, and ERIC electronic databases. Results from the meta-analyses indicated that structural social support was not significantly related to overall adherence, but functional social support was.

Comment: These results point to the importance of functional rather than structural social support. Structural social support refers to the network around a person and is often operationalised by whether the person is married or living with others. Functional support is defined in terms of the aid or encouragement that someone gets from their social network. The results are consistent with the proposition that it is not merely the presence of others but the quality of the relationship that matters. The authors propose that, in the case of hypertensive patients, other people close to the patient may buffer the negative effects of unsatisfactory relationships with healthcare providers by providing information and health advice that results in improved levels of adherence.

Reference: *Ann Behav Med* 2015;49(3):307-318

[Abstract](#)

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Jacqui Adair

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Jacqui is a Clinical Nurse Specialist at Middlemore Hospital in Auckland.



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Psychological support needs of patients with head and neck cancer and their caregivers

Authors: Richardson A et al.

Summary: This study explored the psychological support needs of patients with head and neck cancer (HNC) and their caregivers. 83 patients with HNC and 73 of their caregivers completed questionnaires at diagnosis and again 6 months later. Patients reported that 'just being there', empathy, maintaining normality and practical support were helpful from family/friends, and they wanted information, honesty, positivity and empathy from clinical staff. About 40% of patients and caregivers wanted formal psychological support, particularly early after diagnosis and during treatment. Most of them wanted face to face sessions providing individualised information and coping strategies.

Comment: This New Zealand study looked at the types of support head and neck patients report needing from family and friends as well as from clinical staff both at diagnosis and 6 months later. In terms of family and friends, just being there through the treatment process and recovery was identified as being important along with maintaining a sense of normality in their daily life and offering practical support in terms of domestic help and transport. At 6 months, having someone to talk to about the situation were identified by patients as an additional important theme. In terms of clinical staff, patients identified their most useful role as providing information, giving honest answers to questions, remaining positive and optimistic, as well as providing empathy in their interactions with patients. This study is a reminder that asking patients what they find helpful and want can be extremely useful and a good reminder of the value of good communication in clinical settings.

Reference: *Psychol Health* 2015: published online May 26

[Abstract](#)

Can music with prosocial lyrics heal the working world? A field intervention in a call center

Authors: Niven K

Summary: This study examined whether music with prosocial lyrics can reduce customer aggression in the workplace. The hold music played to customers of a call centre was changed regularly over a 3-week period. Levels of caller anger and employee exhaustion were found to be lower on days when callers were played popular music with neutral (but not prosocial) lyrics compared with days when instrumental background music was played.

Comment: Finally, a paper for anyone who has been left on hold listening to music while waiting to get your internet or phone problem sorted. Previous research in social psychology has shown that playing study participants songs with prosocial lyrics increased empathy and prosocial behaviour in laboratory experiments. This researcher sought to see if this effect worked in customers waiting for call centre staff. The songs in the prosocial condition were Michael Jackson's "Heal the world," The Beatles "Help!", and Bob Sinclar's "Love generation" and these were compared to neutral songs by the same artists and to the normal instrumental music that is common to call centres. In contrast to the laboratory, the researchers did not find that songs with prosocial lyrics reduced customer anger. However, music with neutral lyrics did have a positive effect compared to the instrumental music that is often played to customers waiting on the line. I suspect the fact that your problem is yet to be resolved and you are still waiting swamps the effect of any type of music in this situation.

Reference: *J Appl Soc Psychol* 2015;45(3):132-138

[Abstract](#)



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