# RNZCGP DIGEST



The Royal New Zealand College of General Practitioners Te Whare Tohy Rata o Aotearoa

#### ISSUE 10 | DECEMBER 2016

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#### THE ROYAL NEW ZEALAND COLLEGE OF GENERAL PRACTITIONERS

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Velcome to the RNZCGP digest. The digest contains a selection of recent New Zealand and overseas journal articles and other publications that might be of interest to general practice and to those working in the primary care sector. Some of the articles are available in full at the links provided. Others require an online subscription.

## **Quality improvement**



SEMINAL PIECE: Medicine's ethical responsibility for health care reform – the top five list

### Author: Brody H.

In this 2010 article, Howard Brody called on US medical specialty societies to identify five tests and treatments that were overused in their specialty and did not provide meaningful benefit for patients. He said that based on regional variation in costs in the US, about 30 percent of health care costs could be saved without depriving patients of beneficial care. Doctors in higher-cost regions would need to order tests and treatments in a similar way to that of doctors in lower-cost regions. Thus, practising more in accordance with evidencebased guidelines and studying more seriously the data on regional practice variations would help to control costs.

Brody proposed that each specialty society appoint a study panel to report that specialty's 'Top Five' list. The panels should include members with special expertise in clinical epidemiology, biostatistics, health policy, and evidencebased appraisal. The Top Five list would be composed of five diagnostic tests or treatments that are commonly ordered by members of that specialty, that are among the most expensive services provided, and that have been shown by the currently available evidence not to provide any meaningful benefit to at least some major categories of patients for whom they are commonly ordered. Each specialty society would develop a plan to educate its members to discourage the use of the listed tests or treatments for specified categories of patients.

Brody explained that a Top Five list demonstrates to the public that we are genuinely protecting patients' interests and not simply 'rationing' health care for cost-cutting purposes. He also stresses that doctors, not government, should take the lead in identifying the waste to be eliminated.

Reference: N Engl J Med. 2010;362(4):283–5. doi:10.1056/ NEJMp0911423

**Comment:** Dr Brody's work was part of the foundation for the Choosing Wisely campaign, which now partners with more than 70 societies comprising over one million clinicians. **The Choosing Wisely campaign was officially launched in New Zealand** this month by the Council of Medical Colleges, the Health Quality and Safety Commission and Consumer New Zealand.

## **Medicines**



Topical corticosteroid addiction and withdrawal – an overview for GPs

#### Author: Sheary B.

This Australian paper considers topical corticosteroid (TCS) withdrawal as a potential complication of topical corticosteroid treatment. Although TCS withdrawal and addiction is increasingly discussed in social and mainstream media, it has received little attention in medical publications. This paper aims to provide a succinct, evidence-based overview for GPs.

Some patients with a long-term history of inappropriate moderate- to high-potency TCS use, especially in the face or genital area, can develop symptoms when they cease treatment. These include: widespread redness, burning pain, peeling skin, oozing areas and severe itch. The author advises that appropriate treatment of eczema is essential, but continuous use of TCS for more than two weeks should be avoided.

GPs might counsel patients at risk of developing TCS addiction by being mindful of this condition. GPs can also play a key role in supporting diagnosed patients through a challenging withdrawal period.

Reference: Aust Fam Physician. 2016;45(6):386-8.

## **Cross-cultural care**



SEMINAL PIECE: The pervasive effects of racism: experiences of racial discrimination in New Zealand over time and associations with multiple health domain

Authors: Harris R, Cormack D, Tobias M, Yeh LC, et al.

This seminal paper looks at the prevalence of self-reported experience of racial discrimination in New Zealand by ethnicity, changes over time and associations with multiple health measures. The paper uses data from the 2002/3 and 2006/7 New Zealand Health Surveys.

The authors investigated the prevalence and type of selfreported racial discrimination and found that reported experience of racial discrimination was associated with negative mental and physical health outcomes. The association tended to be higher for mental health outcomes, particularly psychological distress.

There was an apparent dose-response relationship, with multiple reports of racial discrimination experience associated with a higher risk of negative health outcomes. Experience of a racist physical attack had an even stronger association with negative health outcomes, including poorer mental health, chronic mental health disorder and poor/fair general health.

The study also demonstrated a linear dose-response relationship between reported experiences of racial discrimination and self-reported cardiovascular disease. Additionally, it found an association between experience of racial discrimination and health risk factors of smoking and hazardous drinking.

Racial discrimination in New Zealand is an important issue for some population groups and has the potential to impact on a

broad range of health outcomes and risk factors. The authors conclude that it is essential to identify the social and political processes that generate racism and to research potential mitigating factors.

**Reference:** Soc Sci Med. 2012;74(3):408–15. http://dx.doi. org/10.1016/j.socscimed.2011.11.004

## **Health information**



Consent and widespread access to personal health information for the delivery of care: a large scale telephone survey of consumers' attitudes using vignettes in New Zealand

Authors: Whiddett D, Hunter I, McDonald B, et al.

In light of New Zealand's move towards a single national electronic health record, this study looked at the extent to which patients would consent to share their health information during the delivery of health care. Data were collected in a national telephone survey in 2008. Respondents were presented with vignettes describing situations where their health information was shared and asked if they would consent. Data collected pertaining to 18 vignettes that covered provision of care were reanalysed using new statistical methods in 2016. The vignette framework was developed in the UK for the Patient Electronic Record, Information and Consent project and tailored to the New Zealand context.

This study included 2438 adults aged 18 years or over, which was reasonably representative of the general population and users of primary care services. The results showed that females and ethnic Europeans were over-represented in the sample, but modelling suggested that gender and ethnicity did not have a significant impact on people's willingness to share their information. The authors found that the middle-aged group were less willing to consent than the young or elderly, and people with chronic conditions tended to be more willing to share their information (p=0.022). Rates of consent ranged from 89% (95% CI 87% to 92%) for sharing of information with hospital doctors and nurses to 51% (47% to 55%) for government agencies. Of all the individuals' characteristics, the presence of sensitive information had the most significant impact on their rate of consent. While

most respondents said their records did not contain sensitive information, 19.5% said that they did and 1.5% refused to answer the question.

The respondents indicated that they would be unwilling to share their information in the way that was proposed to them in 32% of answers. Accordingly, the authors make the following two suggestions and estimate that they would result in a five percent increase in people consenting to share their health information with the health care professionals involved in their care:

- 1. Limiting access to just a brief summary record rather than a full medical history. Some local initiatives in New Zealand using 'opt-off' consent to introduce summary records have been reasonably successful.
- 2. With consumers, co-design ways to address the management of sensitive information within electronic health records (eg managing sensitive information so that it ceased to be considered sensitive by reducing the stigma attached to certain health information).

The authors conclude that their results highlight the diversity of public opinion and the difficulty of gaining consensus on the use of health information.

**Reference:** BMJ Open, 2016;6:e011640 doi:10.1136/ bmjopen-2016-011640

## Health technology



## Using genetic technologies to reduce rather than widen health disparities

Authors: Smith CE, Fullerton SM, Dookeran KA, et al.

This US article examines the challenges of ensuring that genetic technologies are universally accessible. They comment that in contrast to genetic mutations, which remain fixed throughout a lifetime, epigenetic changes can be affected by lifestyle behaviours such as diet, smoking, and physical activity. A growing body of research seeks to understand how socioeconomic status contributes to health disparities through epigenetic mechanisms.

Despite the impressive leaps forward in genetics, not all groups are positioned to benefit from discoveries in the field. Breast cancer and chronic kidney disease represent two common diseases for which genetic and molecular knowledge have grown exponentially but for which racial and ethnic health disparities persist. In this article, the authors illustrate how genetics has been used to combat breast cancer and kidney disease and discuss how to advance genetic applications in health care in a way that reduces racial and ethnic disparities instead of widening them.

They discuss disparities in referral for genetic counselling with this being less likely to occur in patients from minority groups, and state that the genetic databases on which clinical decisions about treating breast cancer rely are incomplete for minority groups. This severely undermines the quality of genetic testing for members of minority groups who do receive it.

The authors recommend that more research should be dedicated to identifying and understanding the full range of

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genetic diversity in all people, and more funding is needed for minority-focused genetics research. They also recommend that research into gene environment interactions should be undertaken, and that health care providers and patients must also be educated to understand the risks, benefits, and limitations of genomic, epigenetic, and molecular research.

Reference: Health Aff (Millwood). 2016;35(8):1367–73. doi: 10.1377/hlthaff.2015.1476

## Models of care



#### Author: Marshall M, Gray DP.

This UK editorial challenges the thinking around the need to change the traditional model of general practice. Such changes have included the formation of practice networks, an increasingly multidisciplinary workforce, and new integrated models of care. The changes may benefit patients and the health system, and address claims that practices are too small, isolated, and increasingly unable to meet patients' needs and expectations.

However, the authors claim that insufficient attention is being paid to the potential unintended consequences. They argue that observational evidence shows that a strong focus on general practice delivers better outcomes, better system performance, and better patient experience. General practice achieves these outcomes by providing accessible care to all communities, being oriented around the 'whole person', reducing over-medicalisation, being more effective than specialist care in dealing with multimorbidity, and being more likely to focus on prevention and enabling patients to look after their own health.

The authors claim that it is questionable whether changes to the structure, governance and working process of general practice will enable it to continue these benefits. They argue that decision makers should use published evidence about how to organise and deliver health services. For example, using evidence that shows the effect of practice size on patient experience and the outcomes, benefits and risks of different models of multi-professional working. Rigorous evaluation of new models is essential.

**Reference:** BMJ. 2016;355. doi: http://dx.doi.org/10.1136/bmj. i5698



## Rethinking primary care's gatekeeping role

#### Authors: Greenfield G, Foley K, Majeed A.

'Gatekeeping' describes the role of primary care doctors in authorising access to specialty care, hospital care, and diagnostic tests. This paper considers the aspect of controlling referrals to specialists. The authors explain that gatekeeping ensures patients see specialists only for conditions that GPs cannot manage, and this in turn saves specialists' time for more complex cases. Some claim that gatekeeping may reduce waiting times to see specialists. They also say that providing more choice and direct access to specialists might intensify inequalities in both the use and quality of care. Evidence from European countries shows that gatekeeping helps to reduce inequalities, provides decisionmaking support to disadvantaged groups and lessens unnecessary specialist use by advantaged groups who tend to see specialists more often.

On the other hand, the authors say that the claim about gatekeeping being an effective cost-containment method may be wrong – they found no significant differences in the percentage of gross domestic product spent on health care in countries with and without gatekeeping. Gatekeeping has been associated with delayed diagnosis and adverse outcomes. Financial factors (eg competition and incentives) might encourage GPs to refer patients to specialists less than or more than needed. Evidence on the effect of gatekeeping on quality of care and patient or provider satisfaction is inconsistent and limited. Gatekeeping also negates the person-centred model, patient choice and shared decision-making.

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The authors suggest that a good gatekeeping policy balances clinical needs, patient choice and system constraints. Relinquishing the gatekeeper role for specific patient groups (eg children and people with eye disorders or musculoskeletal problems) may help to reduce the burden on GPs. However, any relaxation of gatekeeping should be carefully evaluated. They conclude that gatekeeping should be a complementary mechanism in a system that implements integrated care. Rather than focusing on the 'gate', we should switch to focusing on more collaborative work between GPs and specialists with patients taking ownership of their health.

**Reference:** BMJ. 2016. 354:i4803. doi: http://dx.doi.org/10.1136/ bmj.i4803

## **Professional practice and development**

Burnout and doctors: prevalence, prevention and intervention

#### Author: Kumar S.

This article from a New Zealand–based author reviews the issue of burnout in doctors and makes recommendations regarding prevention and intervention. The term 'burnout' was coined by Freudenberger in 1974 to describe the emotional exhaustion experienced by workers in the public services.

The author discusses the risk factors for burnout in doctors, the sources of stresses and the consequences for doctors and their patients. He mentions the importance of the work environment, which can contain both protective and stressful elements but also notes that workplace stress does not necessarily equate to burnout. He states, "Many of the risk factors for burnout among doctors are static in nature or are difficult to address through intervention strategies. In general, three levels of change are recommended in order to reduce the risk of burnout:

- 1. modifying the organisational structure and work processes;
- improving the fit between the organisation and the individual doctor through professional development programmes so that better adaption to the work environment occurs; and
- individual-level actions to reduce stress and poor health symptoms through effective coping and promoting healthy behaviours."

The author states that there is a shortage of well-designed studies on interventions for established burnout. He concludes that prevention appears to be, once again, far more beneficial than treatment when it comes to burnout.

**Reference:** Healthcare. 2016. 4(3):37. doi: 10.3390/ healthcare4030037



Which positive factors determine the GP satisfaction in clinical practice? A systematic literature review

Authors: Le Floch B, Bastiaens H, Le Reste JY, et al.

This research looked at the question, "Which factors are related to GP satisfaction in clinical practice?". The researchers aimed to focus on positive factors that keep GPs in their profession, saying that most policies have addressed the negative aspects described in research.

The European General Practice Research Network created a research team comprising eight national groups, which undertook a systematic literature review on GP job satisfaction. The review included 17 articles published between 1 January 2000 and 31 December 2014. The research team collected 157 factors related to GP job satisfaction, which were grouped into three themes: general profession-related themes, specific GP satisfaction factors, and professional and private life. From the literature review, the authors summarise the findings in a description of the GP who is satisfied in his or her work:

"Satisfied GPs are professionals who can keep a reasonable workload balance, which provides sufficient income and who are free to organise their work and determine how they work. Satisfied GPs are sufficiently challenged in their work and feel competent and useful. They have opportunities to broaden their tasks such as being involved in teaching or academic work. They wish to preserve their own health, and value good relationships with their patients and other professionals, and live in an environment/community that appeals to them and to their family."

**Reference:** BMC Fam Pract. 2016;17(1):133. doi: 10.1186/s12875-016-0524-x

## **Professional practice and development**



## Getting by with a little help from friends and colleagues

Authors: Rogers E, Polonijo AN, Carpiano RM.

A cross-sectional internet-based survey of residents in the Faculty of Medicine's Postgraduate Medical Education Programme at the University of British Columbia (Vancouver) suggests that "social relationships might help residents mitigate the deleterious effects of burnout".

Burnout consists of emotional exhaustion, depersonalisation, and a decreased sense of personal accomplishment. This study aims to investigate how residents' families, friends and colleagues might be associated with levels of burnout. Specifically, it tested the following hypotheses: greater social support will be associated with lower levels of burnout, increased loneliness will be associated with higher levels of burnout, and greater social support will be associated with lower levels of burnout via the mediating influence of lower loneliness.

An email invitation to complete the survey was sent to 1082 residents, of which 234 responded (22%) – 43.4% of respondents were in the family practice programme. Personal burnout and work-related burnout (but not patientrelated burnout) were measured using the Copenhagen Burnout Inventory and burnout responses were collapsed to create binary variables. Loneliness and social support (the dependent variables) were assessed using a 3-point loneliness scale and the Lubben Social Network Scale respectively.

Authors initially found that residents who have more support from friends experience less work-related burnout. However, this association was attenuated and became non-significant once loneliness was controlled for. Loneliness was found to positively correlate to personal and work-related burnout, possibly reflecting that many clinicians still spend much of their time in isolation. More friend and colleague support was found to be associated with lower levels of loneliness.

Although the study has some limitations, including its focus on the most severe levels of burnout symptoms and possible systemic non-response bias, it provides a new angle from which to investigate burnout: loneliness. The authors propose that initiatives to reduce burnout on residents (and possibly physicians too) focus on the stability and growth of their relationships.

**Reference:** Can Fam Physician. 2016. 62(11);e677–e683.

## **Public health**



Lack of housing, hospital treatment and premature mortality: a cohort study of people in Counties Manukau district

Authors: Thornley S, Marshall R.

This research started from the premise that a lack of housing is likely to adversely affect health and to complicate recovery from medical disorders. The authors conducted a cohort study of people aged 15–75 years admitted to Counties Manukau inpatient facilities between 2002 and 2014, using ICD-10 codes to identify patients with insufficient housing. Diagnostic records were used to identify people with substance use and other clinical conditions. Mortality records were used to track survival.

During the study period, 1182 people with insufficient housing were identified, 126 (10.7%) of whom died during a median follow-up of 5.7 years. Median survival of this cohort was 63.5 years (95% CI 58.7 to 69.9), which is about 20 years less than the general population. Of this cohort, the strongest associations with premature mortality were among people with cannabis-related disorders (adjusted hazard ratio (aHR), 2.15), diabetes (aHR 1.75) and Māori (aHR 1.8).

The study highlights the excess mortality and spectrum of disease among people with insufficient housing and that Māori are disproportionately represented. The co-occurrence of mental health and addiction issues suggest that mental health services are an important referral point. The authors also suggest that a lack of secure and safe shelter likely hamper recovery and treatment. Overseas studies indicate that improved health and cost savings result from programmes to provide secure shelter for populations such as these.

Reference: N Z Med J. 2016; 129(1440):84-93.

### **Public health**



## Housing affordability and children's cognitive achievement

Authors: Newman S, Holupka CS.

This research looks at the effects of housing affordability on the cognitive achievement of children. The authors hypothesised that unaffordable housing forces the household to spend relatively more on housing, resulting in less discretionary income to use on purchases important for children's healthy development and creating economic stress. They also hypothesised that spending relatively little on housing would also have a deleterious effect because that housing is likely to have physical inadequacies and be located in distressed neighbourhoods. This second hypothesis leads to a third – that spending a relatively large share on housing may have some beneficial effects that may mitigate loss of income. In particular, because areas with less-affordable housing are also likely to have higher-quality schools, less crime and other features that benefit children. The researchers reviewed data from the US Panel Study of Income Dynamics (which includes measures of cognitive achievement) and several other sources from 1990–2002 alongside data from the 2004–2009 from a Consumer Expenditure Survey conducted by the Bureau of Labor Statistics. They examined the relationship between housing affordability and spending on children using multivariate statistical analysis techniques that also addressed the possibilities of selection bias and non-normal distributions. The average child in the analysis sample was 10 years old, average annual family income was less than US\$24,000, more than 60 percent of families were non-white, and on average spent nearly half their childhood on welfare and less than half their childhood in a two-parent family. Roughly half the children experienced severe housing cost burdens (51% or more of household income). Spending on children averaged roughly \$4,000 per year. Most of this spending was on necessities, and only one-quarter was spent on child enrichment.

The authors found an inverted U-shape relationship between housing affordability and children's cognitive achievement. Achievement suffers in families with very high housing cost burdens, consistent with conventional wisdom. But it also suffers in families with very low housing cost burdens. Both children's cognitive achievement and child enrichment expenditures were maximised when the housing cost burden was roughly 30% of household income. This raises the significant policy question of whether cash-assistance or in-kind assistance (such as housing) is better for maximising children's cognitive achievement.

**Reference:** Health Affairs. 2016;35(11):2092–9. doi: 10.1377/ hlthaff.2016.0718

<sup>7</sup> Time spent reading the RNZCGP Digest has been approved for CME for The Royal New Zealand College of General Practitioners' General Practice Educational Programme (GPEP) Years 2 and 3 and Maintenance of Professional Standards (CPD/MOPS) provided that a Learning Reflection Form is completed. Please click **here** to download a CPD/MOPS Learning Reflection Form. One form per Digest is required.

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