

Good Questions

Issue Eight

August 2007

One summer, two health risks: how can we protect ourselves?



Rising waters: rising problems for mental health?

So far, summer 2007 in the UK has been the wettest since records began (more than 240 years ago). Parts of England and Wales have been hit by severe flooding, affecting thousands of homes and leaving many without clean water.

In the wake of the floods, the Department of Health has issued advice regarding the risk of water-borne infections and chemical contamination. The emergency services have worked hard to minimise the impact of the floods on physical health and communities have come together to provide support. However, despite warnings from the Health Protection Agency that the psychological trauma caused by flooding should not be underestimated - the biggest health risk is likely to be mental stress – the



media has paid relatively little attention to this and the provision of such support is unclear. Research shows that experiencing a flood is linked to:

- depressive symptoms¹
- psychological distress^{2,3}
- a reduction in the sense of control over one's life^{1,4}
- decreased quality of life (assessed using the Chinese GQOLI-74)⁵
- loss of routine, optimism and time with loved ones⁴

A reciprocal model developed in the USA implies that sense of control and depressive symptoms may mutually affect one another, but also that “stressors may indirectly affect

...continued on page 2



Sun protection: why are so many of us dying for a tan?

Following the dismal weather many of us in the UK experienced earlier this summer, it is easy to get carried away when the sun eventually comes out. Bookings for last minutes holidays have risen by an average 40% and, on the last weekend in July, record numbers flew from UK airports to sunnier climes.

Most of us feel better when the sun shines and the benefits of a couple of weeks in the sun are too many to mention. We all know that relaxing feeling of sitting by a pool or on a beach – our faces warmed by the sun and our hands cooled by a large glass (water, of course!). Yet, due to sunburn, many of us will spend some of our holiday rather red and embarrassed, with discomfort ranging from mild soreness to unbearable pain.



However, the desire for a sun tan is only a recent phenomenon. Prior to the Industrial Revolution, bronzed bodies belonged to manual labourers and to be ‘tanned’ was a symbol of low social class. Pale, porcelain skin was in vogue – the more affluent you were, the more likely you were to remain indoors. In 1923, after cruising from Paris to Cannes, fashion designer Coco Chanel stepped off the Duke of Wellington's yacht with a startling suntan, apparently obtained by accident. The press and fashion world assumed that the very stylish and influential Frenchwoman was making a fashion statement. As a result, bronzed skin became truly desirable. By the 1930s, the sun tan stood for health, wealth and style.

...continued on page 4

Inside this issue:

Rising waters: rising problems for mental health?	1
Sun protection: why are so many of us dying for a tan?	1
In the Journals: How quickly do systematic reviews go out of date?	2
In Brief	3
Update from CONSORT	3
Good Answers?	3
In the News	4
Forthcoming events	4

'We need to provide psychological support and develop effective interventions to prevent loss of psychosocial resources when they are needed most'

... continued from page 1

sense of control through depressive symptoms, which could lead individuals to be more vulnerable to future stress⁷. Depression and stress may be impacted by a lack of social support and inability to adjust⁶, as well as flood damage and financial loss. Household income, gender, age, level of introversion and education may be confounding variables^{2,5}.

The Conservation of Resources stress model has been used to examine the role of psychosocial resource loss in the aftermath of flooding in the USA. Interventions designed to prevent psychosocial resource loss may reduce the long-term effects of such disasters⁴.

Similar flash flooding has recently hit parts of South Africa and Asia, while south-eastern Europe is experiencing dangerous heat waves. It is tempting to ascribe this extreme weather to climate change, but scientists are reluctant to make this link despite an expectation of heavier extreme rainfall events in most places as the climate warms and the atmosphere becomes more moist. Even in the absence of a clear link, it is important to remember that we can minimise the risk of more extreme weather in future years by reducing our 'carbon footprint' [see box].

In the meantime, we need to consider the problems posed by floods this summer. As well as providing continuous medical and emergency support for flood victims, research indicates that we need to provide

psychological support and develop effective interventions to prevent loss of psychosocial resources when they are needed most.

Reducing your carbon footprint at work

- Car share or take public transport
- Use recycled products
- Recycle waste paper and other materials
- Don't print documents unnecessarily. If you have to print, print 2 pages per side, duplex
- When you take a tea break, fill the kettle with only as much water as you need
- Turn off your computer and monitor when you are away from your desk
- Turn the lights off when you leave the office

References

1. Stimpson JP (2006). Prospective evidence for a reciprocal relationship between sense of control and depressive symptoms following a flood. *Stress & Health*, 22(3): 161-166.
2. Hutton D (2004). Psychosocial effects of a natural disaster: A post-flood assessment in the Red River valley. *Environ*, 32(2): 27-43.
3. Ginexi EM et al (2000). Natural disaster and depression: A prospective investigation of reactions to the 1993 Midwest Floods. *Am J Comm Psych*, 28(4): 495-518
4. Smith BW & Freedy JR (2000). Psychosocial resource loss as a mediator of the effects of flood exposure on psychological distress and physical symptoms. *J Traum Stress*, 13(2): 349-357.
5. Tan HZ et al (2004). The effect of a disastrous flood on the quality of life in Dongting lake area in China. *Asia-Pac J Pub Health*, 16(2): 126-132.
6. Maltais DA et al (2005). Social support, coping and psychological health after a flood. *Sciences Sociales et Sante*, 23(2): 5-38.

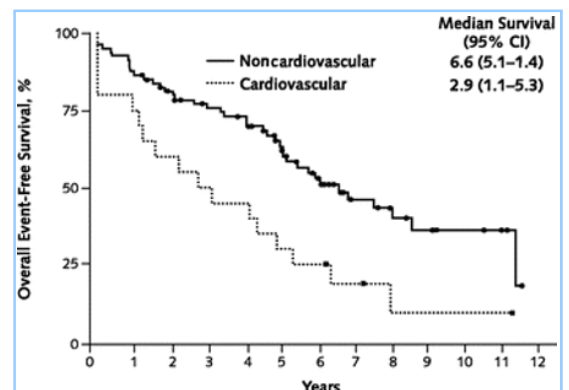
In the Journals

'How quickly do systematic reviews go out of date? A survival analysis'

Systematic reviews and meta-analyses are considered to be the highest level of evidence-based medicine. They are used to guide clinical decision-making, research and healthcare policy. It is recognised that systematic reviews may well be out of date by the time they are published (or soon after) but relatively little research has been conducted to determine how long their findings remain stable and relevant.

Researchers writing recently in the *Annals of Internal Medicine* have estimated that the median duration of survival, free of a signal for updating was 5.5 years (CI 4.6 to 7.6 years). However, 15% (CI 9% to 24%) need updating within one year and 23% (CI 15% to 33%) need updating within two years.

Quantitative signals for updating include statistical significance or relative change in magnitude of at least 50% involving one of the primary outcomes. Qualitative signals include substantial differences in characterisations of effectiveness and caveats about previous findings that may influence clinical decision-making.



Reproduced with permission from *Ann Intern Med* 2007;147:224-233.

Authors need to aim for speedy publication of their reviews and consider whether or not they have the means to update them. When referring to a systematic review more than one year old, more recent evidence may be required. [Contact us](#) if you need help conducting or updating a systematic review.

In Brief

■ [FDA Approves First Quick New Test for Malaria](#)

Last month, the FDA approved the marketing for the 'Binax NOW Malaria Test' which provides a "faster and easier to use" test for malaria. We all know what it's like to be bitten by a mosquito when you're trying to enjoy a well-deserved break in the tropical or sub-tropical parts of the world. Unfortunately, the itching, soreness, swelling and embarrassing red lumps are not the primary concern. Malaria spreads through the bites of infected mosquitoes. Symptoms (e.g. fever, headache, and vomiting) can appear around 10-15 days later. Current diagnostic tests are time-consuming and involve difficult lab work. A multi-centre study, among populations where malaria is prevalent, revealed 95% accuracy when comparing the new 'Binax NOW Malaria Test' to the standard microscopic diagnosis. It is thought that the test will be a useful tool for clinicians unaccustomed to diagnosing the disease in the US and other parts of the world where malaria is not a common presentation.

■ [UK Department of Health establishes General Pharmaceutical Council \(GPhC\)](#)

Last month, the 'Professional Regulation and Leadership Oversight Group' (PRLOG) was

set up by the DoH to establish a new pharmacy regulator - the GPhC. The purpose of the PRLOG is to advise and work with Health Ministers to identify ways in which leadership in the pharmacy profession can support the GPhC effectively. Minister of State for Public Health, Dawn Primarolo, welcomed input from the PRLOG because they do not represent a specific organisation and will be capable of spanning a range of interested parties to help achieve significant changes in the pharmacy profession.

■ [Resurgence of the abortion debate in Roman Catholic Latin America](#)

The Lancet reports that Roman Catholic Latin America has become "increasingly polarised as the abortion issue is more openly discussed". While some countries have loosened restrictions in recent years, others have firmly clamped down. For example, the federal district government of Mexico City has passed a law which legalises abortion in the first 12 weeks while Nicaragua has passed a law prohibiting abortion. However, abortion is more than a moral debate - it is also a public-health issue, due to the high mortality and morbidity associated with illegal abortions. The debate is expected to continue to be a hot topic in Latin America for many years to come.

Update from CONSORT

(<http://www.consort-statement.org>)

The CONSORT Statement is an evidence-based, minimum set of recommendations for reporting randomized controlled trials. It offers a standard way for authors to prepare reports of trial findings, facilitating their complete and transparent reporting, and aiding their critical appraisal and interpretation. CONSORT's new website includes:

- The definitive version of the CONSORT Statement
- The CONSORT checklist: examples and explanation of each item
- Translations of the CONSORT Statement into ten languages
- Extensions to the main CONSORT Statement for different trial designs, interventions and data types
- Browseable bibliographies of the evidence underpinning CONSORT
- History and impact of CONSORT
- News articles on the developments of CONSORT
- A full glossary of terms

Good Answers?

Every month in "Good Questions", we give you the opportunity to benefit from your own "Good Answers". Just give some thought to the problems we pose and send us your answers.

This summer has been the wettest since records began. How many mm of rainfall has fallen in England & Wales between May & July this year?

The closest estimate will win, send answers to: info@ahpresearch.com. The lucky winner will receive an Amazon voucher. The closing date for entries is 12 noon on **Friday 31st August**.

We will publish the answer to this month's problem in next month's issue, along with the name of the winner. If you would prefer to remain anonymous, just let us know.

Last month's "Good Answer" was a 'cognitive debriefing study'.

... continued from page 1

More recently, this desire has, for some, become a concerning obsession: “*tanorexics*’ are obsessed with having a permanent deep tan and are compelled to use tanning machines much more than is healthy”¹.

In recent decades, scientific research has shown detrimental immediate and long-term effects of tanning, and although the association between sun damage and skin cancer² is well known, many people do not take adequate protection [see box]. In other words, knowledge alone is not enough. Approx. 40% of adolescents and 30% of adults do not use any sun protection other than sunscreen³ - half are not even thinking about giving up sunbathing or avoiding the sun at the hottest times of day³. So, why is that?

The SMART way to avoid skin cancer

Spend time in the shade between 11-3

Make sure you never burn

Aim to cover up with a t-shirt, hat etc

Remember to take extra care with kids

Then use factor 15+ sunscreen

Also, report changes in moles or unusual skin growths to your doctor.

Top tips from Cancer Research UK

Essentially, many people still view a tan as synonymous with good health. Positive attitudes towards being tanned and being in the sun are both strongly associated with time spent in the sun, intentional tanning, sun bed use, and going on holiday to a sunny resort⁴. Conversely, perceiving sunbathing as risky is associated with using various forms of sun protection and intending to reduce sun exposure.

In contrast to many other health-related decisions (e.g. undergoing predictive genetic testing or breast cancer screening), the decision about whether or not adopt sun protective behaviours is associated with a higher level of knowledge about the risks, but is also much more dependent on situational factors. Unsurprisingly, socialising with people who sunbathe frequently is related to intentional tanning and holidays to sunny resorts⁴.

In short, sun protection is a complex behaviour, dependent on conscious and

and automatic processing of health information. The battle between health and appearance has never been clearer and we need to find appropriate and effective ways to promote health protective behaviours. As in the 1920s, we continue to be influenced by celebrity culture. Pick up any weekly magazine and you will see countless images of celebrities sunning themselves on beaches or sporting a “healthy glow”. Perhaps its time that celebrities took a lead to help make pale skin fashionable once again.

References

1. <http://news.bbc.co.uk/1/hi/magazine/6101740.stm> (downloaded 31/07/07).
2. Elwood J & Jopson J (1997) Melanoma and sun exposure: an overview of published studies. *Int J Cancer*, 73: 198-203.
3. Kristjánsson S et al (2004) The importance of assessing readiness to change sun-protection behaviours: a population-based study. *Eur J Cancer*, 40(18): 2773-80.
4. Bränström R et al (2004) Attitudes, subjective norms and perception of behavioural control as predictors of sun-related behaviour in Swedish adults. *Prev Med*, 39(5): 992-9.

In the News...

Pill popping: the lazy way to health

<http://news.bbc.co.uk/1/hi/health/6919279.stm>

Health symptoms aren't linked to cell phone tower emissions, study finds

<http://www.sciencedaily.com/releases/2007/07/070726210108.htm>

New genes discovered for MS

<http://www.time.com/time/health/article/0,8599,1647940,00.html?xid=rss-health>

Review ordered on lab test labels

<http://news.bbc.co.uk/1/hi/sci/tech/6919505.stm>

Trials start on new TB vaccine

<http://news.bbc.co.uk/1/hi/health/6919537.stm>

Forthcoming events:

15 - 18 Aug 2007
EHPS 21st Annual Conference:
Maastricht

12 - 14 Sept 2007
Division of Health Psychology Annual Conference: Nottingham

10 - 13 Oct 2007
ISOQOL 14th Annual Congress:
Toronto

20 - 23 Oct 2007
ISPOR 10th Annual European Congress:
Dublin

13 Dec 2007
UKSBM 3rd Annual Scientific Meeting:
Warwick

For further details on any of these events, please visit our [events](#) webpage.