New journal publishes 200-word papers

A new online journal called The Journal of Brief Ideas which publishes 200-word papers has launched and is already causing a stir, Nature reports. Journal co-founder David Harris, a former physicist turned science journalist, says the papers are not peer reviewed before publication, but the journal is developing a reader ratings system of ranking papers. Each paper receives a digital object identifier (DOI). “Good scientists have far more ideas than they know what to do with,” Nature quoted Harris as saying. “It would be better to get that work out into circulation.” Comparisons have already been drawn with the 140-character microblogging network Twitter, but Harris says the papers are “real papers and much more substantial than tweets”.

http://www.nature.com/news/journal-publishes-200-word-papers-1.16925
http://beta.briefideas.org

3D printing makes cheap prostheses for children

An online volunteer organisation in the United States called E-nable is providing cheap prosthetic hands for children, the New York Times reports. Children with damaged or missing fingers and hands often must wait until they have stopped growing to receive a state-of-the-art prosthesis, which can cost thousands of dollars. E-nable, founded in 2013 by Dr Jon Schull, matches children with volunteers with a 3D printer. “Designs may be downloaded into the machines at no charge, and members who create new models share their software plans freely with others”, the NYT reports. Materials cost between US$20 and US$50, making them affordably replaceable as the child grows. And they’re kid-friendly, coming in designs called Cyborg Beast, Raptor Hand and Talon Hand, and in fluorescent colours.


Indian children receive wrong treatments for deadly diseases

A new study from Duke University in the US shows health care providers in rural India rarely know the correct treatments for childhood diarrhoea and pneumonia, and even when they do, rarely prescribe them properly, Science Daily reports. Diarrhoea and pneumonia accounted for 24% of deaths among children 1 to 4 years old — about 2 million deaths worldwide in 2011. Bihar, India, where the Duke study was conducted, has an infant mortality rate of 55 per 1000 live births, the highest in the country. Eighty per cent of the 340 health care providers in the study did not have a medical degree. “For diarrhea, 72 percent of providers reported they would prescribe oral rehydration salts [ORS] … but only 17 percent actually did so”, Science Daily reports. “Those who did prescribe ORS also added other unnecessary or harmful drugs.” Research leader Professor Manoj Mohanan, was quoted as saying: “We need to understand what incentives cause providers to diverge from proper diagnosis and treatment”.

http://www.sciencedaily.com/releases/2015/02/150216131148.htm

From NPS MedicineWise

Safety through reporting

Using a medicine or medical device has inherent risks. Based on current medical knowledge, not all adverse events can be prevented, underscoring the importance of continuous evaluation and monitoring of harms associated with the use of therapeutic products.

An estimated one in 10 patients have had an adverse reaction to a therapeutic product in the past 6 months. Of these reactions, half would have been moderate to severe, and most are not reported. Around 400 000 general practitioner consultations each year involve a medicine-related problem, yet the Therapeutic Goods Administration (TGA) received only 17 500 reports in 2013, of which only 700 (4%) were from GPs.

Reporting adverse events is a crucial part of ensuring the safety and effectiveness of therapeutic products in Australia. This reporting triggers meaningful actions by regulatory agencies, manufacturers and sponsors. Sometimes just a single report can initiate action.

NPS MedicineWise and the TGA have developed two online learning modules to support health professionals to report adverse events associated with therapeutic products (http://learn.nps.org.au/mod/page/view.php?id=5551) and contribute to the TGA’s ongoing safety monitoring activities. Key features include a detailed explanation of the importance of reporting adverse events in an increasingly active health system, how to build reporting into practice, and what happens to reports once they are submitted to the TGA.

These modules build skills to actively participate in continuous safety monitoring by identifying, documenting and reporting adverse events. They also promote a culture of adverse event notification in clinical practice.

Reporting adverse events relating to the use of medicines, vaccines or medical devices to the TGA is one way health professionals can contribute to safer use of therapeutic goods across the health system and reduce the threat to patient safety. Everyone shares in this responsibility.

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doi: 10.5694/mja15.00192

Pedro, who has had five cerebrovascular accidents, drinks water with the help of his daughter Daniela inside their house in Brasilandia, a slum in São Paulo, Brazil. Brazilians are hoarding water in their apartments, drilling homemade wells and taking other emergency measures to prepare for forced rationing that appears likely and could leave taps dry for up to 5 days a week because of a drought. In São Paulo, the country’s largest city with a population of 20 million, the main reservoir is at just 6% of capacity, with the peak of the rainy season now past. Some residents of the Brasilandia slum said they were often without water for 13 hours a day.

Picture: Nacho Doce/Reuters/Picture Media
Traditional methods making a comeback

The International Business Times reports that traditional medical techniques, such as the use of maggots for wound debridement and leeches for venous congestion postsurgery, are making a comeback. Maggots are used widely in Kenya for wound debridement, with doctors and researchers saying maggot saliva has unique antibacterial properties that may reduce the need for antibiotics. In the United States the Food and Drug Administration approved the use of leeches as “medical devices” in 2004 for draining pooled blood after surgery. “The saliva of the leech also contains enzymes and compounds that act as an anticoagulation agent, with hirudin being a major agent that binds itself to thrombins”, the IBT reports.

Cate Swannell  doi: 10.5694/mja15.n0302

MJA Comments

The best Comment each month will receive $50.00

Email a 100-word comment on any health-related topic to: comments@mja.com.au

Send us your thoughts on this issue’s suggested topic:

Should Medicare cover consultations for medical certificates required by patients’ employers?

Climate change

The coal industry has recently promoted energy poverty as a justification to burn more fossil fuels. It’s rather ironic as such poverty was never a concern until business interests were threatened. While energy accessibility is a determinant for health, published medical research concludes that the benefits of burning coal for electricity generation are outweighed by the negative health costs. And it is the developing nations that stand to benefit most from embracing healthier renewable energy; not only do they face the greatest burden from climate change, but they can also bypass outdated centralised energy systems. Just as they have with mobile phone technology.

George Crisp
General Practitioner, WA

Climate change is not the only symptom of unsustainable development and environmental degradation, but it is definitely one of its major and urgent consequences. Strategies to mitigate climate change will invariably have to involve decarbonising our economy and reducing greenhouse gas emissions. The threat of climate change can be a catalyst that helps us re-imagine the way we live. It is an opportunity to lead more sustainable and healthier lives as we strive towards a fairer world where we can look beyond our own short-sighted personal, regional or national interests.

Kritthika Murali
Medical Registrar, VIC

Since the establishment of the scientific method, political activists have often tried to hijack science for their own ends. The suggestion that an increase of carbon dioxide from 0.03% to 0.04% in the atmosphere will cause climate and societal disruption is just the most recent example of an interesting but flimsy hypothesis being distorted for political reasons. It is critically important that doctors and other scientists remain sceptical and base their opinions on factual data and high-quality research rather than flawed computer models and assertion.

Malcolm Brown
Occupational Physician, VIC

Congratulations: Peter Arnold (retired GP) from NSW will receive $50.00 (donated to The Fred Hollows Foundation) for his comment The chimera of a remote medical workforce (MJA p119, 16 Feb 2015).


MJA InSight Poll

Should GPs include financial decision-making capacity in assessments of older patients?

- Yes – it can impact on health
- Maybe – with good parameters
- No – not a GP’s role

Total respondents: 126

Take part in next week’s poll on: www.mja.com.au/insight