

# Keeping abreast of the latest diabetes research: Adolescent BMI and mortality, CVD, polypharmacy and predatory journals

Too busy to keep up to date with the latest research? In this series, Trisha Dunning, Chair in Nursing at Deakin University and Barwon Health, Australia, selects the latest papers of interest to diabetes nurses.

## BMI in adolescence and diabetes mortality in midlife

Twig G et al (2016)

*Diabetes Care* 39: 1996–2003

These authors measured the BMI of 2294 Israeli adolescents and grouped them according to US-derived age- and gender-adjusted percentiles. Over a median follow-up of 18.4 years, the association between adolescent BMI and diabetes-related mortality in later life was assessed.

There were 481 deaths from diabetes over the follow-up. Compared with the 5–24<sup>th</sup> BMI percentile group, there was a graded increase in diabetes-related mortality from the 25–49<sup>th</sup> percentile group upwards.

These findings suggest that adolescent BMI values, even those in the accepted “normal range”, predict mortality up to the 7<sup>th</sup> decade. The results are likely to apply to other nationalities and highlight the importance of early diagnosis of obesity and type 2 diabetes.

## Healthy lifestyle in people at high genetic risk of CVD

Khera AV et al (2016)

*N Engl J Med* 375: 2349–68

It is well established that a healthy lifestyle can reduce cardiovascular disease (CVD) risk. Khera et al’s study suggests adopting a healthy lifestyle can also reduce the risk in individuals with a high genetic risk of CVD. The researchers defined a healthy lifestyle as four factors: not smoking, healthy weight range, regular physical activity and a healthy diet. They studied 60 000 participants in three prospective cohorts.

Individuals at high CVD risk who

adopted three or four healthy lifestyle factors significantly reduced their risk of CVD events compared with those who had an unhealthy lifestyle, with a 10-year risk of 5% vs 11%. Each healthy lifestyle factor was associated with a reduced risk of CVD events, with hazard ratios of 0.56 for not smoking, 0.66 for no obesity, 0.88 for regular physical activity and 0.91 for healthy diet.

These findings might not be new, and they make clinical sense. However, they highlight the importance of stressing the benefits of adopting healthy lifestyles for people with high genetic risk.

## Polypharmacy in older people with multiple chronic conditions

Vandermause R et al (2016)

*J Nurs Scholarsh* 48: 533–42

Polypharmacy is common and often necessary in people with multiple chronic conditions. However, it increases the medicine self-care burden for older people, and often their carers, as well as the risk of medicine-related errors and adverse events, hospital admissions and death.

These researchers examined the experiences of 30 people aged ≥60 years, taking five or more medicines, who had more than one chronic condition when a new medicine was added to their existing regimen.

Common causes of poor compliance included poor access, the timing of the dose, the appearance of the medicine and related side effects. The addition of a new medicine required the individual to acquire new information, fit it into their existing routine, and it made them uncomfortable because it reinforced the “powerful hold of the illness.”

The study highlights the significant

burden of medicine self-management and the need to explore people’s medicine-related beliefs and attitudes and daily routines when providing medicine education. Just providing information about a medicine is not enough to achieve adherence and enhance outcomes.

## Predatory open-access journals

Oermann MH et al (2016)

*J Nurs Scholarsh* 48: 624–32

There is an ever-increasing plethora of online open-access journals. While there are many benefits to online publishing, there are also pitfalls. Online journals vary in quality, and many target naïve authors and exist purely to make money out of them. The term “predatory journal” was coined to describe such journals.

These authors identified 140 predatory nursing journals from 75 publishers. Most journals were recent additions, and many only published one or two volumes before stopping. Most originated in India, Nigeria and Pakistan. Most authors wrote in response to spam emails. Some peer reviewers and editorial board members were not aware their name was listed on journal websites.

Authors should check the credentials of journals before submitting papers. Consulting with experienced colleagues and/or medical librarians can be helpful. Reputable open-access journals are indexed in sites such as PubMed and are listed in the Directory of Open Access Journals. ■

**Editor’s note:** This journal, although not present on the above listings, has never sought to charge authors for publishing their articles, and all articles are peer-reviewed by the Editorial Board and/or independent external reviewers.