Hello Dementia News readers,

In its fifth year, Dementia News is getting a makeover. In exactly one week (19 February), we’ll be moving to a new online format that will allow you to read about the latest developments in dementia research as they happen, comment on and discuss stories with the authors and other readers, and browse through an indexed archive of Dementia News stories. A printable version of Dementia News will still be available for those who would like it, and the fortnightly email will now include a short preview of each story, with a link to read the full article online.

The Dementia News makeover will coincide with the launch of our new dementia research website. One of the great things about this website is that you will now have the ability to search for all previous Dementia News articles from 2013. The articles will be categorised according to different areas of dementia research, so if you want to find a particular article this will now be easier than ever.

Along with the new online format, this year we are really aiming to give our readers even more ways to understand, discuss and participate in dementia research. As we’ve hinted over the past few editions, the website will include podcasts and video interviews with leading researchers, and we are also launching a ‘participation portal’ to help people interested in taking part in dementia research find relevant studies that are close to them.

In this edition’s ‘Understand’ section I write about two interesting new studies – one which suggests that omega-3 supplementation increases brain size and another suggesting that the pesticide DDT (banned in Australia) might be associated with Alzheimer’s disease. I also write about a review paper asking the question, can exercise programs help people with dementia?

In the ‘Discuss’ section I give an update on Alzheimer’s disease clinical drug trials. How close are researchers to finding treatments or even a cure for Alzheimer’s disease? I spoke with Associate Professor Michael Woodward, Head of Aged Care at Austin Health in Melbourne about the latest findings and his thoughts on the future of this vital area of research.

I hope you enjoy this edition.

Ian McDonald
Dementia News editor
A new study has shown that women with higher levels of omega-3 fatty acids also have larger brain volumes. This study, published in the Journal *Neurology*, measured omega-3 levels in the blood of 1,111 women aged over 65 and not diagnosed with dementia who were taking part in the Women’s Health Initiative Memory Study in the mid-late 1990s in America. Eight years later, each participant underwent brain scans, which measured total brain volume and the volume of certain regions, such as the hippocampus – the brain’s memory centre.

The total brain volume of those who had higher levels of omega-3 eight years previously were on average two cubic centimetres larger than those who had lower levels of omega-3. Moreover, higher omega-3 levels were specifically associated with a larger hippocampus (approximately half a cubic centimetre). However, cognition was not assessed in this study, so it was not possible to determine whether omega-3, and the associated larger brain volumes, resulted in better cognition or reduced risk of dementia.

An earlier Cochrane review (published in 2012) looked into whether fish oil supplementation (fish oil is high in omega-3) can enhance cognition and/or reduce the risk of dementia. The review concluded that there was no benefit of omega-3 supplementation on cognition among people without dementia and there is currently no evidence to suggest that omega-3 supplementation can reduce the risk of dementia. However, the review did identify a need for more research in this area and also noted that omega-3 supplementation (or regular consumption of fish as part of your diet) can be beneficial to your overall health.

Click on the link for further information

*Neurology*
*Cochrane Review*
PESTICIDES IN BLOOD LINKED WITH ALZHEIMER’S DISEASE

Levels of DDE, a chemical compound of the pesticide DDT (banned in Australia for over 30 years) have been found to be almost four times higher in people with Alzheimer’s disease. This result was published in the Neurology Journal of the American Medical Association. In this preliminary study, undertaken in the USA, DDE levels were measured in the blood of 79 people without Alzheimer’s disease and 86 people with Alzheimer’s disease.

While levels of DDE in the blood were nearly four times higher in people with Alzheimer’s disease, the results were not clear cut. Some people with Alzheimer’s disease still measured low levels of DDE and likewise some people without Alzheimer’s disease measured high levels of DDE. Interestingly, the researchers also found that high levels of DDE were associated with increased levels of the amyloid precursor protein (commonly measured in high amounts in people with Alzheimer’s disease).

So, what does this mean? Researchers suggest that measuring levels of DDE could potentially help diagnose some people with Alzheimer’s disease. However, an editorial comment written in the same Journal by Doctors Steven DeKosky MD and Sam Gandy MD, entitled ‘Environmental Exposures and the Risk for Alzheimer Disease,’ stated that while the results presented in the paper are valid, more rigorous research is required to confirm DDT and Alzheimer’s disease are linked. The editorial also pointed out a few weaknesses in the study such as not knowing how long and even if people with high DDE levels were exposed to the DDT pesticide earlier in life.

This study does acknowledge, however, the importance of assessing environmental risk factors and their association with diseases – particularly with the use of everyday products such as pesticides and other chemicals.

Click on the link for more information
JAMA neurology
JAMA neurology editorial
NEW REVIEW SUPPORTS EXERCISE CAN HELP PEOPLE WITH DEMENTIA

An updated Cochrane review has provided more evidence to support that exercise can significantly improve the cognitive function of people with dementia and their ability to perform daily activities. The review evaluated the results of 16 trials, which included a total of 937 participants.

Authors of the review set out to address three questions:
1. Do exercise programs for older people with dementia improve cognition, activities of daily living, challenging behaviour, depression, and reduce mortality?
2. Do exercise programs for older people with dementia have an indirect impact on family caregivers’ burden, quality of life, and mortality?
3. Do exercise programs for older people with dementia reduce the use of healthcare services (e.g. visits to the emergency department) by participants and their family caregivers?

While the authors reported a lot of variation between the trials, overall it was found that exercise programs did improve cognition and activities of daily living in people with dementia. However, there was not enough evidence to conclude that they improve mood or behaviour. The authors also state that there is currently little to no evidence to suggest that exercise programs reduce the impact on family caregivers and health care services – predominately because this has not been properly assessed yet.

Exercise intervention programs for people with dementia are increasingly attracting the attention of researchers. In 2008 when the original Cochrane review was published, only four studies were rigorous enough for inclusion, whereas another 12 studies were found to be suitable in 2013. The authors of the review do stress the importance of a more thorough understanding of whether exercise intervention programs can help people with dementia remain at home for longer. They also suggest that guidelines need to be developed to enable healthcare providers to offer advice about exercise to people with dementia who are living at home or in institutions. This advice should include information about what level and intensity of exercise is beneficial for someone with dementia.

The Alzheimer’s Australia Dementia Research Foundation currently funds multiple research projects which are assessing the benefits of exercise intervention programs for people with dementia.

Click on the links for more information
Cochrane Review
There are currently no treatments for Alzheimer’s disease, but just how close are researchers to finding one?

Around the globe, hundreds of clinical trials are underway assessing a range of potential Alzheimer’s disease drugs and treatments. Unfortunately, in recent years, a number of high-profile Alzheimer’s disease drug trials have reported disappointing results.

So what’s involved in a clinical trial? In order for a drug that has proven successful and progress to the stage where it can be prescribed by a doctor, a rigorous clinical research process must be undertaken to ensure that the medicine is both safe and effective for use in humans.

This clinical trial process often takes five years or more for any given medicine. Only a small percentage of drugs successfully progress through the three stages of clinical trials that are required to establish safety and effectiveness, and they then have to go through a rigorous Government approval process before they can be marketed and considered for public subsidy.

The most recent Phase 3 clinical trials (the largest and most complex phase, involving over 1000 people in each trial) of two Alzheimer’s disease drugs known as Bapineuzumab and Solenazumab showed no improvement in brain function and performance in people with mild to moderate Alzheimer’s disease compared to those taking the placebo treatment. The results of both these studies were published in the 23 January 2014 edition of the New England Journal of Medicine.

Both of these drugs were designed to bind to and remove amyloid proteins and plaques in the brain - commonly associated with Alzheimer’s disease. It is thought that removing these might be a successful way to prevent the disease from progressing. However, with these latest results, researchers are now thinking that one treatment alone might not be enough to reverse the effects of Alzheimer’s disease (including removing amyloid plaques) and suggest that different approaches might be required in future trials.

Dementia News asked Associate Professor Michael Woodward, one of Australia’s leading experts on dementia drug research, for his views on the implications of the recent findings.

He said: “While these results are disappointing, I am still optimistic that we can learn lessons from these trials. Specifically, there are three possible factors that might be at play – are we treating people with dementia too late? Are we using the wrong type of drugs? Or are we targeting the wrong sort of amyloid protein?”.

Associate Professor Woodward has been working in Australia in the field of dementia treatment research for over 21 years and has been involved in trialling 50-60 Alzheimer’s disease drugs during this time.

He went on to say “one likely possibility is that by the time these drugs are given to the participants in Phase 3 trials, there might already be too much brain degeneration to reverse the damage caused by Alzheimer’s disease. For example, in the Solenazumab study there was actually some decline of symptoms in those with the mildest form of Alzheimer’s disease – suggesting we may need to start treating people earlier”.

He finished by saying; “neurodegenerative diseases are very hard to treat – in Australia we have tried to find treatments for Parkinson’s, stroke, Motor Neurone disease, multiple sclerosis and of course dementia, and while we are making some progress in the area of symptomatic treatments we are not doing very well at being able to modify a disease already in progress”.

You can find more information on what you need to know if participating in a clinical drug trial [here].

Click on the link for further information

New England Journal of Medicine - Bapineuzumab
New England Journal of Medicine - Solenazumab
PARTICIPATE TO LEARN MORE

JOB OPPORTUNITY
NHMRC PROJECT MANAGER

The Centre for Health Practice Innovation, Griffith Health Institute, Griffith University, Nathan campus is looking for a Project Manager to coordinate the delivery of an NH&MRC funded project in collaboration with the project’s research team. The project will be undertaken across a number of nursing homes in Southeast Queensland.

The project is a cluster randomised control trial, which will compare usual care with an innovative interactive therapeutic robotic seal and a look-alike plush toy on reducing emotional and behavioural symptoms of dementia for older people living with dementia in residential aged care settings.

The role:
The Project Manager will under the supervision of the project team coordinate and provide key support in all areas of the project.

The person:
The successful person will collect data and assist with data analyses. You will work collaboratively with colleagues in the Centre and liaise with people within the university, the aged care industry and with older people and their families.

For application queries, contact
Ms Samantha Byrne, HR Officer
P: 07 3735 4062.

Closing date: Friday, 21 February 2014 at 4:30 pm

MAKE DEMENTIA RESEARCH A PRIORITY AT THE G20 SUMMIT - SIGN THE PETITION

Help Alzheimer’s Australia get 20,000 signatures for a petition to Tony Abbott to get dementia on the agenda of the G20 meeting in Australia in November.

Australia has shown international leadership on dementia and the G20 is an opportunity to take this to the next level. The recent G8 Dementia Summit led to a commitment to increase global funding for dementia research and to build upon multi-lateral partnerships to strengthen research efforts and meet the challenges of dementia. More information about the outcomes of the G8 Dementia Summit are in its summit communiqué and summit declaration.

Dementia is set to have a global economic impact with projections that by 2050 there will be 135 million people world-wide with dementia. The current worldwide cost of dementia care is over US$600 billion, or around 1% of global GDP. If dementia care were a country, it would rank as the world’s 18th largest economy. We’re urging the Prime Minister to build on action taken at the recent G8 Dementia Summit and place dementia prominently on the G20 agenda.

The goal is to get 20,000 signatures for the petition. Show your support by signing the petition and sharing the petition with your friends and family - http://bit.ly/M6BzOz
PROTECTING PEOPLE WITH DEMENTIA FROM FINANCIAL ABUSE

If you are a person with dementia or care for someone with dementia who has experienced some form of financial abuse in the past, we invite you to share your story with us.

Alzheimer’s Australia NSW is conducting research about past instances of financial abuse of people with dementia. We hope that the research will raise awareness of the issue and develop solutions to reduce the incidence and impact of financial abuse.

You can help us by participating in an interview and telling us about your experiences. Participants will receive a $50 gift voucher as a thank you for their time and for sharing their experience.

NSW based service providers and professionals can also help by completing an online survey about their experiences of supporting people with dementia who have been financially abused and suggestions for preventing people with dementia from becoming victims of financial abuse.

The survey will take 10-20 minutes to complete.

You are not required to provide any information that can identify you. By completing the survey you consent to having your responses used in a consolidated form. The research project has received ethics approval from the Macquarie University Ethics Committee.

You can access the survey here.

We understand these experiences could be difficult and traumatic to talk about for some people. If you would like to talk to a counsellor, please contact the National Dementia Helpline on 1800 100 500.

Please note that Alzheimer’s Australia NSW will not be able to help you retrieve money or property stolen as a result of financial abuse. Please contact the NSW Police if you wish to pursue this.

To find out more about the research and to register your interest in participating, please contact Kylie Sait, Research and Policy Officer at Alzheimer’s Australia NSW.

Phone: (02) 8875 4641
Email: kylie.sait@alzheimers.org.au

The findings from the research will be reported in an Alzheimer’s Australia NSW discussion paper that will provide policy recommendations to Government and practice recommendations for the human service sector. We will also report the research findings at conferences, in journal articles and at community education events.

A copy of the discussion paper will be available on the Alzheimer’s Australia NSW website in mid-2014.

What is financial abuse?
• Financial abuse includes a range of conduct, including:
  • Taking money or property
  • Forging a person’s signature
  • Getting a person to sign a deed, will, or power of attorney through deception, coercion, or undue influence
  • Using a person’s property or possessions without permission
  • Promising lifelong care in exchange for money or property and not following through on the promise
  • ‘Cons’ - the use of deception to gain victims’ confidence
  • Fraud - deception, trickery, false pretence, or dishonest acts or statements for financial gain
  • Telemarketing scams
THE CANBERRA COMPUTERISED COGNITIVE TRAINING TRIAL - VOLUNTEERS NEEDED

- Are you over the age of 60?
- Do you have concerns regarding your memory and/or mood (e.g., depression, anxiety)?
- Do you have home access to a computer with internet?
- Are you able to dedicate some time over 12 weeks (mostly from your home)?

Researchers at the Australian National University (ANU) are currently conducting a research trial designed to assess the benefits of computerised cognitive training for older individuals with mild cognitive impairment and/or mood-related problems. Computer experience is not essential.

To register your interest, get in touch today by contacting:

Ms Shannon Webb T: 02 6125 8288
Dr Alex Bahar-Fuchs T: 02 6125 9705
Or email: cct@anu.edu.au

WHEN SHOULD I STOP DRIVING - DEMENTIA AND DRIVING: A DECISION AID

If you have dementia and drive a car, researchers at the University of Wollongong would like to invite you to participate in a telephone survey.

All participants will be mailed a free information booklet on driving and dementia. The aim of the study is to seek your feedback on this booklet.

For more information about joining this study please contact:

Dr John Carmody MRCPI FRACP
Staff Specialist Neurologist, Wollongong Hospital

Email: john.carmody@sesiahs.health.nsw.gov.au

Telephone: (02) 4253 4430 or 0427 468 544 (Australian residents)
Telephone: 0061 2 4253 4430 or 0061 4 2746 8544 (New Zealand residents)

DICK SMITH FOODS $1 MILLION TO CHARITY YOU DECIDE WHERE IT GOES

Dick Smith Foods will donate $1 million to 74 charities from 1st January to 31st December 2014, and the supporters of Dick Smith Foods will be the sole decision makers as to where the money will go.

Alzheimer’s Australia Dementia Research Foundation is one of the charities that you can vote for.

If you have a dick smith food product in your pantry here is how you can enter:
- Take a photo of the product/s in your pantry
- Email it to charity@dicksmithfoods.com.au
- Name the charity you wish to support

More information here
PARTICIPANTS WITH CONFIRMED MEMORY COMPLAINTS REQUIRED IN WESTERN AUSTRALIA

Researchers from the University of Western Australia are seeking people over the age of 50 with confirmed memory complaints for a study investigating differences in our ability to perform two mental tasks at the same time. The researchers are looking at your ability to hold two tasks in mind at the same time, and to control what information you concentrate on.

Participation entails coming to the researchers’ Fremantle office for around 2 hours for some assessments of your memory and other thinking skills. The aim of the research is to help understand if and in what ways mental control abilities change with age-related illnesses. With your help, we can add to our knowledge about abnormal ageing. You will receive up to $15 to help cover travel expenses. If you have a friend/partner who is also interested in participating, please let the researchers know, as you may be able to complete the tasks together.

To help, please leave a message for Talitha Lowndes
P: 08 6488 7342
E: talitha.lowndes@uwa.edu.au.
For more information please visit the website: http://tinyurl.com/multitaskingAZ

CONTACT

Any questions or comments are welcome.

To subscribe/unsubscribe or if you have any information you would like to see included in future editions please contact:
E: dementia.news@alzheimers.org.au
P: (02) 6278 8916

UNIVERSITY OF WESTERN AUSTRALIA
DEPARTMENT OF PSYCHOLOGICAL SCIENCES
FACULTY OF MEDICINE, NURSING AND HEALTH

This newsletter was funded by the Australian Government as well as the Dementia Collaborative Research Centre: Carers and Consumers
© Alzheimer’s Australia as represented by the Dementia Collaborative Research Centre: Carers and Consumers, 2011
DISCLAIMER: The views expressed in this work are the views of its author/s and not necessarily those of the Australian Government.