

comes and should be routinely assessed by OT. Only 53% of hand burns were reviewed by OT staff. **Conclusion:** OT is an imperative part of NQPBS and provides intervention to a large percentage of patients referred. Given that there is no allocated funding to provide dedicated FTE to the service, clinical prioritisation will need to continue. Ongoing monitoring needs to ensure that those patients deemed at high risk of poor functional outcomes are prioritised by NQPBS for OT referral.

## The Threat of Chronic Hepatitis B and Why GPs Need to Pay More Attention to it

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**Background / Aims:** Worldwide, 350-400 million people are affected by chronic hepatitis B (CHB) and close to a million die each year from associated liver disease such as cirrhosis and hepatocellular carcinoma. In Australia, an estimated 218,000 people live with CHB and the rate of liver cancer is rising. CHB often progresses without symptoms for decades. Consequently, almost half of all cases are undiagnosed and only one in five patients requiring antiviral therapy is currently receiving treatment. Routine antenatal screening and infant vaccination effectively prevent HBV transmission from mother to child. However, HBsAg-positive mothers are rarely followed up after giving birth, and opportunities to include close contacts are missed. The majority of people with CHB are from CALD or Indigenous backgrounds and may experience increased barriers. The overall aim of the current research is to raise awareness in the highly affected Hmong community in Cairns, and to facilitate communication about CHB with health care providers. **Methods/Results:** A survey of 28 GPs shows that factors related to culture and communication are considered the most hindering factors in optimal hepatitis B care. Also, while GPs have good knowledge of risk factors and initial tests, they do not provide adequate information and care to pregnant women and those most at risk, and are unaware of most resources available to them. **Conclusion:** Liver disease and death caused by CHB are preventable if doctors and other health workers get more involved and educated about who needs testing, what tests to order and how to proceed after diagnosis.

## Resilience and its Influence on the Mental Health of Older Australians and Refugees

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**Background / Aims:** This paper summarises the findings of two studies into the link between resilience and mental health. One of these studies focused on older Australians, while the other examined refugees living in Townsville, a regional city in Queensland. Both refugees and older people are at risk groups for developing psychological disorders, such as depression, anxiety and PTSD. In the literature resilience is conceptualised as a psychological buffer that allows the individual to return to baseline levels of functioning and mental health following life stresses. **Methods:** The Clinical Assessment Scale for the Elderly was employed to measure psychological distress among a sample of just over 300 older Australians. The Hopkins Symptom Checklist-25 was used to measure depression and anxiety among a sample of 69 resettled refugees. The Harvard Trauma Questionnaire was also administered to this sample in order to assess PTSD. The latter two scales were developed to be used with culturally diverse samples. Posttraumatic growth was also measured among the refugee sample. **Results:** The refugee sample had much higher rates of psychological distress as compared to the sample of older people. Resilience was found to be predicated of both depression and anxiety among older people, but not predictive of depression, anxiety or PTSD among the sample of refugees. It was however found to predict posttraumatic growth among the refugee sample. **Conclusion:** It appears that resilience buffers against low levels of

distress but may not be associated with reductions in psychological disorders among those exposed to extreme trauma, such as refugees.

## Taking Care of the Children of Townsville Hospital and Health Service Staff During Severe Tropical Cyclone Yasi

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**Background / Aims:** The Townsville Hospital and Health Service (THHS) activated its mass casualty plan to manage a surge in patients presenting in the immediate aftermath of Tropical Cyclone (TC) Yasi in February 2011. This included the provision of a temporary child minding service for staff to facilitate workplace participation. This study aimed to report the acceptability and utility of the child minding service. **Methods:** Surveys were sent to staff who manned the service (operators), to their allied health managers (managers), and to staff who placed children in the service (consumers). **Results:** The child minding service provided 75 episodes of care to children of THHS staff. Of the 37 consumers invited to complete the survey, 16 responded (43%). Most consumers (75%) reported finding out about the service by word of mouth, with some indicating it could have been advertised more widely. All 16 consumers (100%) agreed the emergency child minding service enabled them to attend work during the immediate post-disaster period and none of the consumers lacked confidence with the child minding service. Fourteen of the eighteen operators completed the survey the majority of whom (64%) volunteered to assist with the service. Only 21% although felt the facilities were adequate. All five managers completed the survey. They unanimously agreed they would support the child minding service in future if it was required. **Conclusion:** The child minding service was crucial in enabling staff to return to work to assist with TC Yasi response efforts. The child minding service was well supported by staff of the health service.

## Nano-Titanium Dioxide reduces Photoprotection by Sunscreen Products

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**Background / Aims:** Chemical and physical UV-filters, the active ingredients of sunscreen products, are often used in combination to achieve broad spectrum photoprotection from the effects of UV-light. The physical UV-filter, titanium dioxide (TiO<sub>2</sub>) is available in both nano- and micro-particles. Concern has been raised about the safety of TiO<sub>2</sub> nano-particles and the potential for these particles to penetrate through skin, but has not yet been proven. Photostability of chemical UV-filters is also important to ensure the safety and photoprotection of sunscreen products. TiO<sub>2</sub> can however, promote the photodegradation of chemical UV-filters, reducing their photoprotective character and generating potentially toxic photodegradants. This study investigates the influence of nano- and micro-TiO<sub>2</sub> on the photostability of the chemical UV-filters, butyl methoxy dibenzoylmethane (BMDM) and octocrylene (OC). **Methods:** Both UV-filters, in the presence and absence of nano- and micro-TiO<sub>2</sub>, were irradiated with UV-light in methanol and in an aqueous cream base. UV-filter contents were then analysed using a validated HPLC method. **Results:** While the micro-TiO<sub>2</sub> did not significantly affect the degradation of OC, the presence of the nano-TiO<sub>2</sub> resulted in 38% photodegradation. The photodegradation of BMDM in the absence of TiO<sub>2</sub> was 6%, however, the presence of micro- and nano-TiO<sub>2</sub> resulted in 22 and 34% photodegradation, respectively. **Conclusion:** Results highlight the effect of the TiO<sub>2</sub>-particle size in influencing the photodegradation of BMDM and OC. This research raises a concern of the potential decreased photoprotection of sunscreen products during use.