Climate Change Adaptation Research Grants Program

- Social, Economic and Institutional Dimensions Projects

Project title:

Extreme heat and climate change: adaptation in culturally and linguistically diverse (CALD) communities.

Principal investigators: Associate Professor Peng Bi **Lead organisation:** The University of Adelaide

Objectives:

- (a) To identify cultural, socioeconomic, and linguistic factors affecting vulnerability to heat and climate change in CALD communities in three Australian cities
- (b) To identify vulnerable subgroups
- (c) To make recommendations on ways to increase adaptive capacity in CALD populations

Project design and methods:

The study will be conducted in two parts. In order to meet the main research objective ('to identify cultural, socioeconomic, and linguistic factors affecting vulnerability to heat and climate change in CALD communities in three Australian cities), a qualitative approach will be undertaken involving community engagement with CALD populations. Focus groups and interviews will be conducted with stakeholders from government institutions/departments (e.g. Dept. of Health, Dept. of Family and Community Services, local councils), agencies (e.g. Migrant Resource Centre), non-government organisations (RDNS, Red Cross) and service providers (e.g. Ambulance Services, Migrant Health Service, Multicultural Settlement Services) in Adelaide, Melbourne, and Sydney. Additionally, focus groups with representatives from a range of different CALD communities encompassing migrant groups, ethnic communities, refugee groups and asylum seekers will be conducted, thus engaging the end users from the outset of the project. There will also be face-to-face interviews conducted with CALD individuals in each city as required. The Senior Research Officer (Dr Alana Hansen) will be guided by the Reference Group and local knowledge as to which nationalities and individuals to include in each study location. It is likely these may include for example, the Chinese, Italian and African communities in Adelaide, the Greek and Korean communities in Melbourne, and the Lebanese and Eastern European communities in Sydney. It is estimated that up to 17 focus group discussions will be held in total across the 3 cities to cover the major migrant groups in Australia. The focus groups and interviews will be conducted in English, with interpreters employed as required. They will be semi-structured and based on the research questions. With consent, interviews will be recorded and transcribed.

Whether the capacity to adapt is hindered by lack of acclimatisation or other factors relevant to living in a foreign environment will be explored along with who are most vulnerable (Objective (b)). Socioeconomic, housing, cultural, behavioural and linguistic barriers to adaptation will be identified to gain an understanding of the impact of extreme heat, adaptation measures undertaken, and vulnerability to climate change. Data analysis will involve coding and categorising themes using techniques of thematic analysis to build an analytical description of key issues. NVivo 9 software will be used for computational analysis.

During the second 12 months of the study, the researchers will work closely with relevant government organisations and service providers to determine how best to adapt current guidelines and mainstream information to specifically target CALD communities. The proposed team members including Dr Monika Nitschke and Ms Val Smyth will play a leadership role in facilitating a one-day workshop for approximately 40 key stakeholders, to present findings and garner suggestions and recommendations for a range of culturally appropriate materials aimed to increase adaptive capacity during extreme heat (Objective (c)). It is envisaged these may be similar to that in current messages, but presented for the particular target audience in a culturally and linguistically competent manner. Climate change

adaptation strategies may focus on changes to regular practices, specific care of the elderly and the very young, modifications to indoor and outdoor environments, adequate fluid consumption, and short and long term behaviour changes.

The recommendations outlined at the workshop will be widely distributed for feedback from the communities and other stakeholders, facilitating the deliverables 'recommendations to institutions for the development of cross-cultural material to promote adaptation' and 'feedback to stakeholders and local CALD communities.' Extensive discussions will be held with government advisers, interpreters, and marketing professionals at this stage. Printed material relying heavily on visual imagery may be recommended for target audiences with limited English literacy skills. Whilst the proposed research team will not participate in the development and marketing stages (to be undertaken at the institutional level) it will be ready for necessary consultation and help to assure the efficacy, appropriateness and uptake of the material. The final stage will address the research objective: 'Publication of findings in international peer reviewed journals, and in a final report' as well as presentations at international conferences.