

# **Integrated health promotion is making a difference.....**

A practical example:

## **Moonee Valley Melbourne Primary Care Partnership**

### **Vitamin D Deficiency Project**

#### **What were the issues?**

Vitamin D deficiency is caused by a lack of exposure to direct sunlight and can result in softening and weakening of the bones, muscle and teeth.

Vitamin D deficiency is an emerging public health issue affecting a range of people in the community. Recognised groups at high risk of vitamin D deficiency include:

- Dark skinned people because they require more sunlight due to the pigments in their skin slowing the absorption of ultraviolet radiation.
- People who cover most of their skin from direct sunlight e.g. women who wear veils.
- Any individuals who spend excessive amounts of time indoors away from direct sunlight.

The cities of Moonee Valley and Melbourne are home to many recent arrivals from the Horn of African countries, many of which live in high rise public housing estates. In 2003-2004 Moonee Valley City Council (MVCC) maternal and child health nurses initially reported an increased incidence of vitamin D deficiency in women and young children, which prompted investigation by the council, Doutta Galla Community Health Service (DGCHS) and the Moonee Valley Melbourne Primary Care Partnership (MVM PCP).

Supporting evidence of increased incidence of vitamin D deficiency was confirmed by the Royal Women's Hospital and the Royal Children's Hospital data on women and children presenting with vitamin D deficiency. Of those tested, 80 per cent of women were found to have a vitamin D deficiency below recommended levels, with 91 per cent below the safe level.

The goal is to decrease the incidence of vitamin D deficiency in women and children from high-risk population groups, in particular, dark skinned and veiled communities.

Stakeholders:

- Representatives from MVCC
- Melbourne Health
- University of Melbourne
- DGCHS
- City of Melbourne
- Flemington and North Melbourne Community Centres
- Office of Housing

#### **What has been the integrated health promotion response?**

Strategies include:

- A community research project, conducted in 2005 with the Clinical Epidemiology and Health Service Evaluation Unit, Melbourne Health, to determine the

knowledge of vitamin D within Horn of African communities, and the barriers and enabling factors for uptake of interventions to reduce the risk of, or treat vitamin D deficiency. The results demonstrated the need to create safe environments where individuals can be exposed to sunlight. Ways to increase exposure to sunlight within a safe environment included utilising spaces in and around buildings, and communicating consistent information on vitamin D deficiency and healthy levels of sunlight exposure. The findings of this community research project have been submitted for publication.

- The development of a specific action plan to facilitate the implementation of communication strategies to the community and health professionals.
- A brochure launched in October 2006 to raise awareness of vitamin D deficiency amongst at-risk groups and direct them to their doctor or other health professional for investigation. This brochure has been made available in English, Arabic and Vietnamese and disseminated through primary health and community organisations in the MVM catchment, as well as state-wide Refugee Health networks.
- Identification of vitamin D deficiency as a priority area in the MVM PCP Community Health Plan, 2006 -09, the DGCHS Health Promotion Plan 2006-09 and the MVCC Municipal Public Health Plan, 2004-07.
- Publication of the article, *Partnership tackles vitamin D deficiency*, Health Promotion Strategies, Department of Human Services, Vol 7, No.2 April 2007.
- Poster presentation, *Designing programs to reduce the risk of vitamin D deficiency amongst dark skinned and veiled populations: Community reported barriers to uptake of effective interventions*. Couch D, Brand C, Abi H, Vindigni A, Wark J, 5th Australasian Conference on Safety and Quality in Healthcare, Brisbane, August 2008.

### **What are the impacts?**

The estimated impacts include:

- Raised awareness of vitamin D deficiency particularly amongst health professionals and at risk groups (dark skinned and/or veiled women and their children living in Victoria).
- Improved identification of people suffering from vitamin D deficiency by general practitioners and other health professionals, such as maternal and child health nurses.
- Changes to spaces in around public housing estates to enable increased sunlight exposure for at risk groups.
- The establishment of religious and culturally sensitive recreation services that enable women to receive adequate levels of sun exposure during attendance.
- Certification of the vitamin D supplement, Ostelin, as Halal by its manufacturer.

### **What's next?**

The partners will continue working with local communities to reduce the prevalence of vitamin D deficiency. A key action plan for the next two years will focus on raising awareness, promoting suitably built environments, and research to assist evidence based interventions.

For more information on vitamin D deficiency please go to the [Better Health Channel](#).