

## AUSTRALIAN BEHAVIOURAL RESEARCH IN CANCER

### **Centre for Health Research and Psycho-oncology (CheRP), New South Wales**

#### ***Validity, reliability and clinical feasibility of a needs assessment tool for use in people with progressive cancer***

Ensuring people receive cancer care according to the complexity and severity of their needs, independent of diagnosis or prognosis, has become an important focus. However, implementing care based on the assessment of needs has its own challenges, including how to define need, and how and when to assess need.

Psychometric properties of a newly developed needs assessment tool, Progressive Disease Cancer, were initially explored in a study with health professionals from various disciplines completing the tool to assess levels of physical and psychosocial concerns of simulated patients with advanced cancer and caregivers in taped consultations. A further validation study was conducted to assess the reliability, validity and acceptability of the revised tool in a specialist palliative care service by comparing items in the tool with items from the Palliative Care Problem Severity Score, the Resource Utilisation Groups - Activities of Daily Living and the Australian Karnofsky Performance Scale.

Results from both studies suggest the tool has high levels of reliability, validity and acceptability. Furthermore, it is an efficient tool that can be used by health professionals with a range of clinical expertise to identify individual patients' and caregivers' physical and psychosocial concerns, facilitating a better match of services and resources to the types and levels of needs identified.

#### ***ENRICH (Exercise and Nutrition Routine Improving Cancer Health) program: a lifestyle intervention for cancer survivors and their partners and caregivers***

Lifestyle behaviours such as maintaining a healthy weight and being physically active, can reduce cancer survivors' co-morbidities, protect against recurrence and cancer specific mortality and improve quality of life. However, while cancer survivors are an important target population for health promotion efforts, they have been largely neglected as a specific target group in health programs to date. In addition, partners/carers of cancer survivors are at risk of diminished psychosocial health and share many of the behavioural risk factors of their partners/family members who have cancer.

The ENRICH program aims to improve the lifestyle risk behaviours of cancer survivors and their partners/carers, by providing education and skill development in a series of motivational health coaching sessions and via linking to existing resources to support life-long behaviour changes. ENRICH was developed in reference to Bandura's Social Cognitive Theory and is guided by a chronic disease self-management model. ENRICH will be evaluated via a wait-list randomised control trial (n=150). Participants recruited via cancer support groups will complete one

week of pedometry and self-report measures at baseline, eight and 20 weeks. Content of the face-to-face sessions (six x 2 hour sessions over eight weeks) includes a home walking program, a resistance training program and education/skill development on healthy eating.

### **Behavioural Research and Evaluation Unit (BREU), South Australia**

#### ***Workplace diet and exercise interventions***

The Cancer and Behavioural Science (CaBS) research group is a collaboration between Cancer Council SA and Flinders University, examining participation in healthy lifestyle choices that have been associated with decreased risk of cancer and other chronic diseases. Led by Professor Carlene Wilson and Dr Amanda Hutchinson, the group has conducted a review of published material on diet and physical activity interventions in the workplace with the aim of undertaking translational research focused on generating participation in overweight preventing behaviour. Results indicated the importance of motivation and/or rewards in promoting healthy lifestyle choices within the work context.

To date an honours student in psychology has conducted a randomised, control study on the benefits of providing free fruit in the workplace. Employees' consumption of fruit increased during the program, particularly in those who were not meeting the guidelines in terms of daily fruit intake.

#### ***Effect of chemotherapy on cognition in cancer patients***

Chemotherapy has been shown to result in cognitive impairments, particularly in women with breast cancer. The CaBS group is currently examining the nature of the impairments associated with different cancer treatments for colorectal cancer.

#### ***Smoking behaviour among secondary school students***

Results of the South Australian component of the triennial Australian Secondary Students' Alcohol and Drug Survey (ASSAD) showed approximately 5% of students aged 12-17 years are current smokers, representing a significant decrease from 7% in 2005. The survey of 2870 students from 61 randomly selected schools across the state revealed highest rates of smoking among those reporting a close friend or family member who smoked, those who had a higher disposable weekly income and those self-reporting lower ability at school.

#### ***Diet, physical activity and sun protection behaviour among secondary school students***

As part of the ASSAD survey, BREU commissioned questions concerning diet, physical activity and sun protection behaviours. Despite an increase over time in the proportion of adolescents consuming the recommended amount of vegetables, breads and cereals, and in the

proportion who engaged in the recommended amount of physical activity, the majority of South Australian adolescents are not meeting Cancer Council SA dietary or physical activity recommendations. Furthermore, engagement in some unhealthy behaviours (sedentary lifestyle and eating fast food) has increased.

One in three adolescents reported a preference for 'no tan' - a slight improvement from previous years. While a comparison of results showed little change in the rate at which adolescents reported they were sunburnt in the previous summer, a significant decrease was seen in the rate of severe sunburn reported during their lifetime. Despite these results, a continuing decline was seen in the proportion of adolescents who "usually" or "always" take precautions to reduce sun exposure, despite an increase in awareness of the association between UV radiation and sunburn with skin cancer.

Overall, the results of this survey suggest that many adolescents are putting themselves at an increased risk of future health problems by not practising sun protective behaviour, and by not meeting recommendations for adequate fruit and vegetable intake, or adequate levels of physical activity.

## **Centre for Behavioural Research in Cancer (CBRC), Victoria**

### ***Effects of current and plain cigarette package design on smokers' cigarette evaluation***

The tobacco industry has increasingly responded to bans on advertising and promotion of tobacco by making cigarette pack design the cornerstone of its marketing strategy. Tobacco company research has found that the sensory experience of smoking a cigarette can be manipulated simply by changing the design elements of the pack. Consequently, there have been calls for the introduction of "plain" cigarette packaging that would remove all colours and imagery from packs, with only a brand name in standard small font permitted.

This program of research will be one of the first outside the tobacco industry to examine the impact of both current cigarette packaging and plain packaging on smokers' health risk related appraisals of cigarettes when smoked. Three experimental studies will be conducted. The first will assess the extent to which elements of current pack design are responsible for inducing misperceptions about cigarette harm among smokers that carry over into their smoked experiences of cigarettes. The second study will assess whether plain cigarette packaging compared to branded packaging might induce smokers to appraise the same cigarettes, when they are smoked, to be stronger, less palatable, higher in health risks and lower in quality. The final study will assess the relative effects of plain versus branded packaging and current versus 100% front of pack pictorial health warnings on consumer perceptions of pack imagery, health risks and inferred sensory attributes. This research will provide timely evidence for policy makers that will guide corrective regulatory efforts in Australia and other countries.

## ***IMPROVE: Improving Management by Participatory Research in Oncology; the Victorian Experiment***

Cancer patient outcomes and survival depend on timely access to clinical services, including elements of supportive care. While the role of these in achieving optimal results is known for common cancers, there is a scarcity of information regarding less common cancers. IMPROVE seeks to document cancer outcomes for patients with less common forms of cancer (renal, diffuse large B-cell lymphoma, multiple myeloma). The study will determine whether there are any shortfalls in the care provided to patients, using medical records to map patterns of care. As well as investigating the adequacy of care, the study will explore the experience of care from the patients' and their carers' points of view. The study aims to identify any gaps and unmet needs, in both clinical management and the personal needs of patients, their families and carers. The study will work closely with doctors and other service providers, consumers, community and government agencies to identify gaps and translate the findings into improvements in care, survival and quality of life for cancer patients across Victoria. The study is a collaborative project led by the Cancer Epidemiology Centre at the Cancer Council Victoria, with clinicians from across Victoria's Integrated Cancer Services as co-investigators.

## **Centre for Behavioural Research in Cancer Control (CBRCC), Western Australia**

### ***People's awareness of the relationship between energy consumption and expenditure, and its potential application to food labelling***

One strategy to decrease the 53% rate of overweight and obesity in Australian adults is to empower healthier food selection via improved nutrition labelling. Health advocates propose the front-of-pack Traffic Light system to facilitate 'at-a-glance' decision making. The Australian Food and Grocery Council has pre-empted such calls by voluntarily introducing the Percent Daily Intake (%DI) panel. Kelly, Hughes, Chapman et al. (2009) empirically demonstrated Traffic Lights enable a 'quicker' selection of healthy food products than %DI, but a hybrid system combining both the %DI system with Traffic Light colours would be most 'easy' to use overall. These equivocal results question the superiority of Traffic Light over the %DI system. CBRCC is currently testing a novel food labelling model whereby kilojoules are translated into Equivalent Walking Time (EWT) based upon a 70kg male (as per %DI) with average BMR walking at 5 km/h (Naimith's Rule) (3.5 MET). For example, a Mars Bar [53g, 1012kJ] has an EWT of 61 minutes. Sixty-four Western Australian adults are participating in eight focus groups stratified by sex, age (18-34 v 35-55 years) and socioeconomic status (blue v white collar). Discussions are exploring awareness of the relationship between energy intake versus expenditure, and the pros and cons of current nutrition labels and the %DI, Traffic Light and EWT labelling systems. Is it surprising to the average person that to 'burn off' the kilojoules contained within a single Tim Tam biscuit would require 24 minutes of walking, or 47 minutes for a carton of Choc Chill? Would such knowledge help steer

# REPORTS

them towards healthier eating patterns? If the answer to these questions is 'yes', it could be developed into an intrinsically appealing food labelling system potentially superior to the existing %DI or proposed Traffic Light systems. Data collection is scheduled to be completed by January 2010.

## **Viertel Centre for Research in Cancer Control (VCRCC), Queensland**

### ***Colorectal cancer and quality of life study***

We have been conducting a population-based longitudinal study of colorectal cancer survivors which aims to identify the predictors of quality of life in approximately n=2000 colorectal cancer survivors up to five years post diagnosis. The study is in its final year of data collection and has collected data on physical symptoms and the factors that improve recovery and quality of life.

### ***CanChange***

The Colorectal Cancer and Quality of Life study has shown that at 12 months post-diagnosis, 61% of colorectal

survivors are overweight/obese, 62% are insufficiently active and 22% are high risk drinkers. To address this, we have developed a lifestyle intervention, (CanChange), that is telephone delivered to improve the reach of the intervention. CanChange is designed to promote improvements in lifestyle behaviours and includes fortnightly telephone sessions from an experienced health coach over a six month period.

### ***HELP Study – Psychological distress screening by a cancer Helpline***

Up to one third of people affected by cancer experience psychological distress, however screening rarely occurs in routine clinical practice. This study investigated the feasibility of cancer helpline operators screening callers for their level of distress using a brief screening tool (Distress Thermometer, DT). Consecutive cancer patients and carers who contacted Cancer Council Helpline from September-December 2006 (n=341) were invited to participate. Our data suggested that it was feasible for a community based cancer helpline to screen callers for distress using the DT.