

Cancer Forum

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EDITORIAL

Going beyond the Marryalyan

COSA (and certainly in this context, it's not necessary to define the acronym) has a great logo: the Marryalyan. None of the other professional societies, colleges or equivalent national bodies of which I'm aware have anything that approaches this logo in terms of its singularly Australian character. This logo was formally adopted in the 1970s, rather than being prompted by any more recent consciousness of Indigenous Australian culture. Most readers may be aware that the dreamtime story of the twin snakes, as told to us by the Warramirri people (see COSA website), is recounted at COSA dinners to overseas contributors to our Annual Scientific Meeting, who each receive a Marryalyan as a keepsake of their time with us. Good stuff. Works well.

All this is remote from the health problems of Indigenous Australians. Like me, I suspect that without exception, non-Indigenous Australian readers of this journal will be aware that the situation of Aboriginal and Torres Strait Islander people presents an appalling healthcare picture. They face a markedly shorter life expectancy than the rest of us. They suffer from a range of diseases, the onset of which can be traced to social, economic and other circumstances which are often tragically obvious. Like me, you might also have the impression that these health problems do not centre on cancer. Rather, in common with many communities in the developing world, critical health needs centre upon communicable disease and conditions related to poor nutrition, exemplified by diabetes. But occasionally there are indications that the poor health of Indigenous Australians does involve cancer. The matter had not been centre stage in a previous issue of Cancer Forum, prompting a commitment in respect of the first issue for 2005. Namely, the publication, as a Forum, of papers presented to a workshop on Indigenous cancer held in Darwin by The Cancer Council Australia in the latter part of 2004.

The Forums published over the last decade or more have established the character of Cancer Forum as a journal for cancer professionals. The Editorial Board invites investigators of national standing to develop and contribute to these Forums (a scenario which is not usually related to a conference). Usually, such invitations are accepted despite a recognised pile of professional commitments and all of us – members of COSA and other readers – are the beneficiaries. Again, it works well. The Editorial Board normally provides about nine months notice and, sometimes with the encouragement of 'reminders', individual contributors rarely let us down. When they do, various people pitch in and the 'gap' – say one paper among seven or eight – is not noticeable in the final product. At least we on the Editorial Board hope it isn't.

Less than three months prior to the publication deadline for this issue of Cancer Forum, we knew we were in trouble. The manuscripts from the Darwin conference were not going to arrive. And I felt guilty making the associations that I did. I

recalled a conference (not COSA) organising committee where an Aboriginal 'Welcome Ceremony' had been contemplated, then put aside on the basis on the risk that they 'just wouldn't turn up'. I remembered my local church attempting to involve local Indigenous representatives in a ceremony concerning traditional ownership: we never seemed able to have our invitation (and its commitments) accepted. I'm not aware whether our failure to obtain the anticipated manuscripts was actually related in any way to the Indigenous character of the conference. Even without such knowledge, the baggage I had on board was enough to influence my thinking. I was of a mind to put the matter of Indigenous cancer aside. It would be easier to find another Forum subject at short notice, and no reference need be made to the original intention.

I'm pleased that the Editorial Board did not opt for that course. Instead, we opted to address Indigenous cancer, but through a format different from that originally contemplated. In fact, we had some papers from the workshop plus an overview of proceedings. These articles follow. And through these papers, a bleak picture can be discerned. The bleakness is tempered by action in the best traditions of the profession. Beyond that, it's preferable to let the various contributions speak for themselves without offering some summation here. What can be said, however, is that my notion, of Indigenous healthcare not being specifically concerned with cancer, was and is wrong. What can also be said is that the need for cancer care in this context involves all in the team, rather than being predicated on the perception of cultural or personal matters being confined to one sector of the cancer professional community.

Everyone involved in cancer care is aware of concerns that require attention. Urgently. Whether it's decreasing the smoking rate, increasing participation in screening or trials, ensuring total support of the individual patient and his/her family, delivering care equitably across rural and urban communities, or something else. But the health of Indigenous Australians is an issue that runs across all these concerns and merits something more, if that's individually and communally possible. I'm writing this as television images of Australia Day flash past: funny that.

No clarion call is intended. To identify priorities and strategies is way beyond the scope of this Editorial. But I commend the articles that follow. And I hope, that as COSA continues to use the Marryalyan, that usage may be complemented in some way by action, through COSA members or COSA itself, that serves to improve cancer control amongst Indigenous Australians.

Bernard W Stewart
Editorial Board
Cancer Forum

Cancer impact on Indigenous communities

OVERVIEW

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To the already well-known health disadvantages of Australia's Indigenous citizens must now be added the problem of cancer. David Roder's paper (page 7) in this special issue of Cancer Forum brings to light previously unobtainable statistics which show that our Indigenous population suffers disproportionately from cancer in several ways. Firstly, compared with the general Australian population, Indigenous Australians have a higher incidence of cancers with poor outcomes, such as those of the lung and liver. In contrast, the rate is lower for cancers which generally respond well to treatment, such as lymphomas and breast cancer. However, even when afflicted with the same cancers, the outlook for Indigenous people is worse. Partly this is due to later diagnoses, but even stage-matched the prognosis is inferior. These disturbing statistics should ring alarm bells for those of us concerned to ensure that all Australians benefit from recent improvements in cancer management, no matter their race, background or place of residence.

The practicalities of dealing with Indigenous cancer are brought into focus in the paper from Ian Olver and his colleagues (page 10). Using a technique that is novel for a scientific publication but that will be familiar to health professionals who work in the field, namely story-telling, they describe day-to-day difficulties that need to be overcome if we are to improve the outlook for Aborigines and Torres Strait Islanders. They highlight the need for the non-Indigenous population to develop an understanding and appreciation of Indigenous culture.

In a contribution that should open the eyes of the rest of the community, Sandy Angus, an Aboriginal health worker from

Queensland, gives an Indigenous perspective (page 13). She tellingly illustrates how questions of Indigenous health cannot be divorced from the broader issues of racism, neo-colonialism, community disadvantage and loss of social capital. However, on a positive note, she describes how a culturally-respectful program with community involvement has dramatically improved the outlook for cancer of the cervix for Queensland's Indigenous women. The method by which this gratifying result has been achieved provides a model which should be noted by everyone working in this challenging field.

These three papers came out of Australia's first ever conference focusing on Indigenous cancer, held in Darwin in August, 2004 under the auspices of The Cancer Council Australia. With the permission of the publishers of the Medical Journal of Australia, an overview of the conference (entitled "Reducing the impact of cancer in Aboriginal and Torres Strait Islander communities: ways forward") is reprinted on page 17. Those who attended heard a series of unique presentations from workers at the 'coal face' - it was a privilege to be present. Some of the highlights that are not otherwise acknowledged in the papers in this issue of Cancer Forum, are given in the Summary of Presentations.

The Australian cancer establishment and the country's federal, state and territory governments need to confront the issue of Indigenous cancer. That its importance has hitherto been overlooked and neglected shames us all; the matter is urgent. Cancers are occurring that could be prevented and lives are being lost that could be saved, now. The good news is that 'ways forward' were indeed identified at the conference. As described by Sandy Angus, the 'talk-fest' is over; now is the time for action.

The Cancer Council Australia's Darwin conference – summary of presentations

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Reducing the impact of cancer on Aboriginal and Torres Strait Islander communities: Ways forward, covered a range of topics spanning research, treatment and cultural issues.

Following is a summary of presentations not otherwise featured in this issue of Cancer Forum, including scientific presentations along with personal accounts of the impact of cancer and its effect on Indigenous communities.

Dr Ngaire Brown
Australian Indigenous Doctors' Association

Dr Brown referred to the 'double burden of disease', a phrase used to portray peoples in developing countries who are afflicted both by the lingering effect of communicable diseases, as well as the chronic diseases of more 'advanced' societies. One telling statistic: when Indigenous Australians are diagnosed with cancer, they have a markedly greater likelihood of dying from their illness. For males the fatality rate is 83 of 100 cases compared with 43 in the general population. Dr Brown made a plea for Aboriginal health to be included in the undergraduate curricula of all Australian medical schools.

Associate Professor Jacinta Elston
James Cook University, Queensland

A/Professor Elston spoke of her own experience as an Indigenous woman with breast cancer, recommending that hospitals employ Aboriginal liaison officers and that hospital staff undergo cross-cultural training.

Eunice Orsto
Aboriginal health worker
Tiwi Islands, Northern Territory

Mrs Orsto described how, after breast cancer surgery, she consulted her community before accepting chemotherapy and radiotherapy, for which she had to travel thousands of kilometres to Adelaide.

Akarriyuwu Hill
Community Leader

Mr Hill spoke of his personal experience dealing with his grief following his father's death from cancer six months previously. He spoke of the importance of the grieving process and the impact on the community following the death of an elder.

Lorna Murakami-Gold
Cooperative Research Centre for Aboriginal Health, Charles Darwin University, NT

Ms Murakami-Gold spoke about the attitude of Aboriginal people to health research. She emphasised that consultation at every stage of research projects was essential to ensure Indigenous people were fully informed about why the research was important for them. Indigenous people also needed to have some ownership of the process and the data. A more cooperative approach would help to build Indigenous research capacity.

Dr John Condon
Menzies School of Health Research, Darwin, NT

Dr Condon examined cancer rates in the NT (see also Professor David Roder's paper). Lung cancer incidence in Aboriginal males has doubled over 20 years, whereas rates in the general male population are starting to fall. Factors associated with poorer survival from cancer included remote residence, being non-English speaking, being simultaneously affected by two or more chronic diseases, being a current smoker, and having been a heavy alcohol consumer.

Since the conference Dr Condon has released additional research on stage at diagnosis and cancer survival of Indigenous and non-Indigenous people in the Northern Territory.¹

Heidi Lehman
La Trobe University

Ms Lehman reported on a survey of the knowledge and attitudes of Arnhem Land Aborigines to cancer. There was little knowledge of causative factors other than smoking and many held mistaken beliefs about the possible role of injuries and of black magic.

Dawn Maracle
Research and Policy Officer, Department of Health, Ontario, Canada

Ms Maracle discussed the cancer problem in Canadian Aborigines. A particular issue is that tobacco is a local herb and its use is part of cultural tradition. She described how Aboriginal Patient Navigators were employed to assist in negotiating the complex health system.

Bev Dershow
Palliative Care Service, NT

Ms Dershow opened a session on cultural issues, pointing out that for Aborigines, family, culture and 'country' (ie the land to which they belong) were of overriding importance.

Jeremiah Baker-Balung
Royal Darwin Hospital

Mr Baker-Balung described how, for Aborigines, each body part can be a symbol of a family member. In radical contrast to the western sense of 'next of kin', for Aboriginal patients the person giving consent depends on the body part that is affected.

Viki Briggs
Centre for Excellence in Indigenous Tobacco Control, Victoria

Ms Briggs pointed out that, while in the general Australian population the smoking rate fell from 35% to 23% between 1980 and 2001, amongst Aborigines the rate in 2002 was still 50%. Encouragingly, she described promising tobacco control initiatives in Queensland (Smokescreen) and Western Australia.

Dr Christine Connors
Preventable Chronic Disease Program, NT

Dr Connors addressed the challenge of chronic diseases including cancer, in relation to lifestyle factors such as poverty, unemployment and remote residence. Control requires an organised program approach; by this means several important health measures have improved in the NT; healthy foods are becoming more widely available and alcohol consumption has stabilised.

Tony McCartney and Margaret Culbong
National Aboriginal Community Controlled Health Organisation

Mr McCartney and Ms Culbong described the Aboriginal community-controlled health services, of which there are over 130 throughout the country. They provide 'Aboriginal space', health promotion including provision of healthy foods, welfare services and social support.

The meeting finished with a facilitated discussion forum which identified priorities for action including: more collaborative relationships between the Indigenous and general communities; greater Indigenous participation in research programs; better access to treatments, both mainstream and traditional; a Cancer Council workforce more inclusive of Indigenous staff; capacity building among Indigenous health services; cultural education of the non-Indigenous health care workforce; and advocacy with state, territory and federal governments to emphasise the importance of the issues.

1 Condon JR, Barnes T, Armstrong BK, Sleva-Nayagam S, Elwood JM. Stage diagnosis and cancer survival for Indigenous Australians in the Northern Territory. *Med J Aust.* 2005;182:227-280

Comparative cancer incidence, mortality and survival in Indigenous and non-Indigenous residents of South Australia and the Northern Territory

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Introduction

Cancer incidence has been poorly defined by Indigenous status in Australia, due to difficulties encountered in all jurisdictions in obtaining accurate information on race. During 1988-1994, the Epidemiology Branch of the South Australian Health Commission implemented a special project, in which extensive attempts were made to record all cancers in Indigenous residents of that State and to validate Indigenous status.¹

A further collaborative project to estimate incidence by race was undertaken in 2003.² Collaborating partners included the Epidemiology Branch and Aboriginal Services Division of the Department of Human Services, the Aboriginal Health Council of South Australia, and The Cancer Council South Australia. In this project, incidence relativities (for all cancer sites combined) between Indigenous and non-Indigenous South Australians, as determined in the 1988-94 study,² were generalised to the broader 1977-2001 period. Incidence rates for Indigenous cases were apportioned by site according to the age-sex distribution by site for this broader period.

Meanwhile, the Northern Territory Cancer Registry completed a special project to assess relative rates of cancer in the Indigenous and non-Indigenous populations of the Northern Territory. These data were presented in a landmark publication that covered the 1991-2001 reporting period.³ This publication provides the most comprehensive and reliable data so far available on cancer epidemiology in Indigenous people in Australia.

Selected data from these Northern Territory and South Australian projects are presented now to indicate comparative rates of cancer in Indigenous and non-Indigenous Australians.

Methodological details of these studies are provided in the respective South Australian and Northern Territory reports.^{1,3} In summary, incidence and mortality data were standardised by age, as specified in these publications, either using the World Population or 2001 Australian population as the standard.^{1,3} Cancer stage was assessed using the summary staging system of the Surveillance Epidemiology End Results (SEER) program of the US National Cancer Institute, while cause-specific cancer survivals were calculated using the Kaplan-Meier product-limit estimate (univariate) or Cox proportional hazards regression (multivariable).^{1,3}

Incidence

Figure 1 shows comparative Indigenous and non-Indigenous incidence estimates for the two jurisdictions. In South Australia, the Indigenous incidence appeared to be about 6% lower than the non-Indigenous incidence for all cancer sites combined. It is evident, however, from 95% confidence intervals that this difference could have arisen by chance.

In the Northern Territory, the Indigenous incidence was found to be 15% lower than the non-Indigenous incidence. Yet it was estimated that the Indigenous figure could have been about 15% lower than actually occurring due to under-ascertainment and misclassification of race.

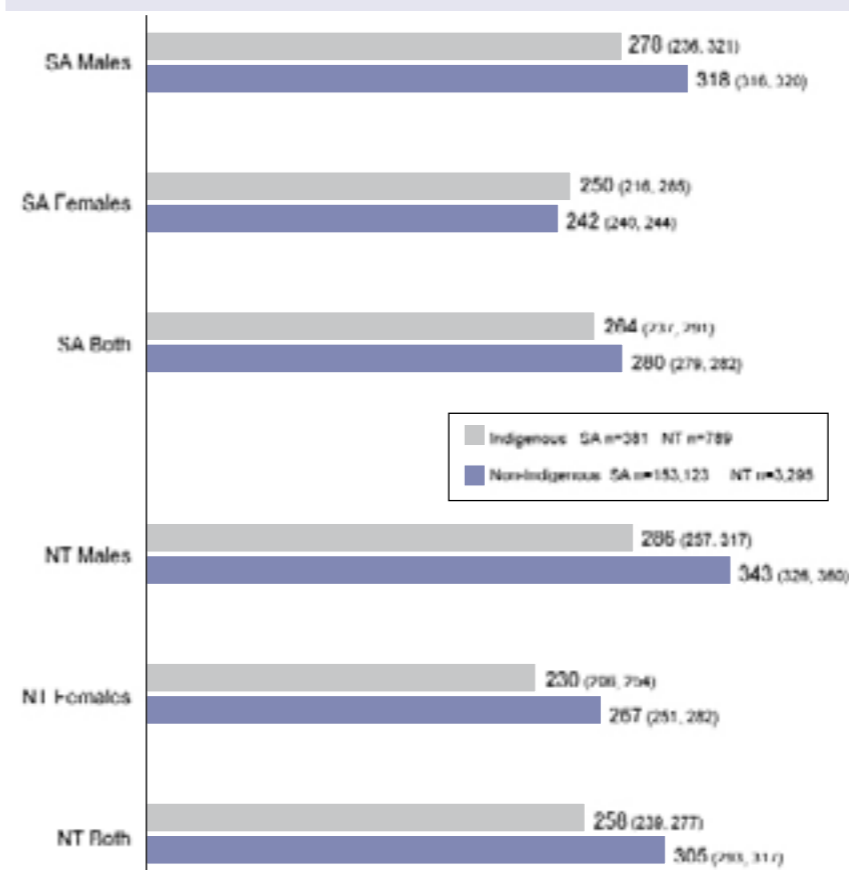
It would appear from these figures, after considering the potential for under-ascertainment of Indigenous cancer rates, that Indigenous and non-Indigenous Australians may have broadly similar susceptibilities to cancer – at least for all cancer sites combined.

Mortality

It is evident from Figure 2 that cancer mortality is higher in Indigenous than non-Indigenous Australians, both in South Australia and the Northern Territory. Broadly speaking, the rate appears to be about 40% higher in Indigenous residents.

The data therefore suggest that while Indigenous and non-Indigenous residents have a broadly similar risk of getting

Figure 1: Estimated annual age-standardised (World Population) cancer incidence per 100,000 (95% confidence limits) by race; SA circa 1977-2001 and NT 1991-2001



Data sources: SA and NT cancer registries.

cancer, Indigenous Australians have a much higher probability of dying as a consequence.

This raises the question of whether Indigenous people acquire more lethal types of cancers, or whether they fare worse from similar types. If they do fare worse from equivalent cancers, it follows that the reasons for this outcome would need to be addressed.

Cancer profiles

Cancers with an elevated incidence in Indigenous people

Both the Northern Territory and South Australian data show a relatively high incidence of cancers of the lung, oral cavity/pharynx/oesophagus, pancreas, liver, gallbladder, and unspecified organ sites, in Indigenous residents. Notably, these are all cancers with low case survivals.^{4,5} In addition, Indigenous people were observed to have a higher incidence of cancers of the cervix and related female organs (i.e., organs with ICD-9 codes of 180 & 184).

The international scientific literature points to a number of risk factors for these cancers.^{6,9} They include:

- n Lung – predominantly tobacco smoking, but also inhalation of other environmental carcinogens.
- n Cervix – a lack of screening for precancerous lesions and infection with carcinogenic human papilloma virus (HPV). It is likely that HPV infection also is a factor in cancer of the vulva.
- n Oral cavity/pharynx/oesophagus – tobacco smoking, alcohol consumption and a low intake of fruit and vegetables.

n Pancreas – tobacco smoking and potentially diabetes and a low intake of fruit and vegetables.

n Liver – endemic infection with hepatitis B and C, and possibly cirrhosis from a high alcohol intake.

n Gallbladder – possibly a history of multiple pregnancies and high body weight.

n Unspecified organs – possibly:

- delayed diagnoses when organs of origin are no longer readily apparent; and
- a poor access to advanced diagnostic technologies.

Cancers with a lower incidence in Indigenous people

Both the Northern Territory and South Australian data showed a lower incidence of cancers of the female breast, bowel and prostate, and cutaneous melanomas in Indigenous residents.

The international literature points to a number of protective factors.^{6,9} They include:

- n Female breast – Early pregnancies and multiple pregnancies.
- n Bowel – Among females, a history of multiple pregnancies. In addition, lower rates of these cancers generally have been found in the lower socio-economic sectors of population groups.
- n Prostate – A low frequency of PSA (Prostate Specific Antigen) testing.
- n Melanoma – Protective skin colouring.

In general, these cancers had relatively high survivals, in contrast to those cancers that were over-represented in Indigenous residents.^{4,5}

The Northern Territory data also showed a lower incidence of lymphoma in Indigenous people, whereas the South Australian data pointed to a lower incidence of haematological cancers (including lymphomas) in this sector of the population. These findings were unexpected. Although the reasons are unknown, it is possible that the immune system of Indigenous people may be more robust and more protective against these cancers.¹⁰

Survival

South Australian data have shown a lower Indigenous than non-Indigenous survival for cancers of equivalent type (Table 1). A corresponding comparison of survivals by race in the Northern Territory for the 1991-2001 diagnostic period revealed lower Indigenous than non-Indigenous survivals for 12 of the 13

Table 1: Case survivals from primary cancers among Indigenous and non-Indigenous Australians; SA 1988-94*

Period from diagnosis (yrs.)	Indigenous (n=139)	Non-Indigenous (n=417)	SEER stage adjusted	
			Indigenous (n=139)	Non-Indigenous (n=417)
	100%	100%	100%	100%
1	55%	68%	60%	66%
2	50%	60%	52%	59%
3	45%	53%	46%	53%
4	40%	52%	43%	51%
5	37%	49%	40%	48%
P value	p=0.008		p=0.058	

* Disease-specific survivals.

3:1 matching of non-Indigenous to Indigenous patients by year of diagnosis, age, sex, primary site, and where feasible, morphology. Date of censoring of live cases: December 31st, 1995.

Data source: SA Cancer Registry

cancer types studied (Condon J, unpublished data).

While Indigenous patients in South Australia presented with more advanced cancers at diagnosis, differences in survival were still suggested after adjusting for stage (Table 1).

Similar findings presented in the Northern Territory in a study of colorectal, lung, breast and cervical cancers and non-Hodgkin lymphomas that were diagnosed in 1991-2000 (Condon J, unpublished data).

The reasons for lower stage-adjusted survivals of Indigenous patients are not known, although it is possible that they could include poorer access to care or a higher prevalence of diabetes, respiratory and other diseases that lead to compromises in treatment and poorer treatment outcomes.

Conclusions

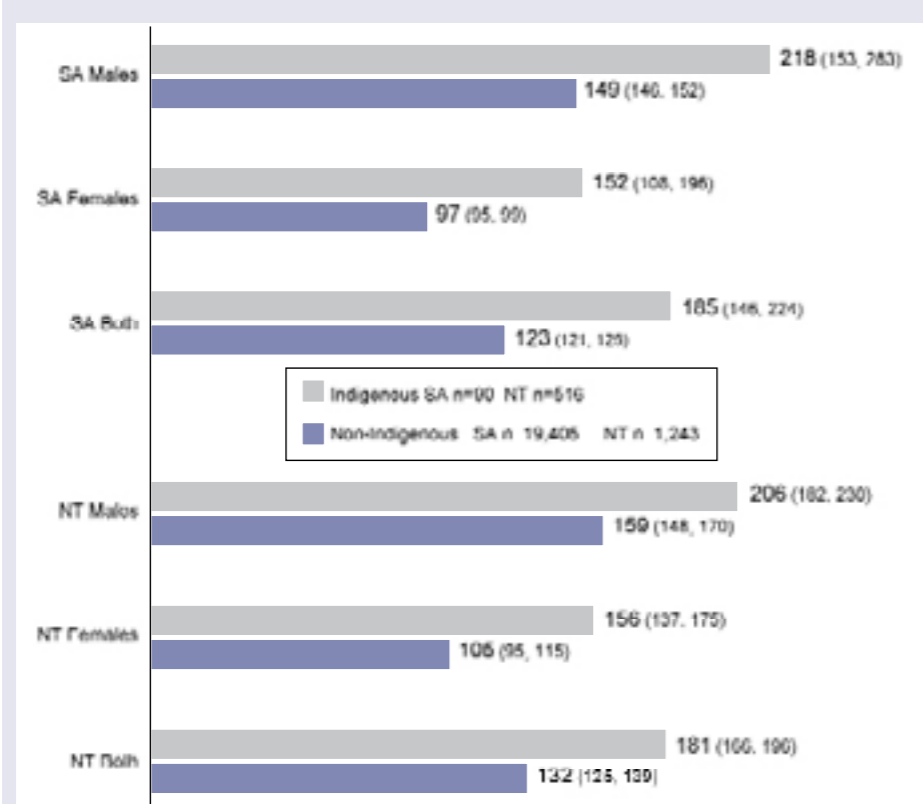
- n Indigenous and non-Indigenous Australians appear to be at a broadly similar risk of cancer, but Indigenous patients are more likely to die from their disease.
- n This higher case fatality is partly due to differences in cancer type, in that Indigenous patients tend to get more lethal types.
- n The prognosis of Indigenous patients also is compromised, however, by more advanced stages at diagnosis.
- n Apart from these influences, Indigenous Australians still appear to have worse outcomes. While the reasons are speculative, it is possible that poorer access to specialised services and a higher prevalence of co-morbidity reduce prospects for cure.

n Irrespective of race, major opportunities exist for cancer prevention through smoking cessation; improvements in diet, with increased intake of fruit and vegetables; reductions in prevalence of excess body weight; avoidance of excess alcohol consumption; and by achieving a better coverage of the population with cervical and other screening services.

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Figure 2: Estimated annual age-standardised (World Population) cancer death rate per 100,000 (95% confidence limits) by race; SA circa 1988-1994 and NT 1991-2001



Data sources: SA and NT cancer registries.

“Some of us know some things and some of us know others” – Reducing the impact of cancer care on Aboriginal and Torres Strait Islander communities

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This is a series of anecdotes by clinicians who, focusing on equitable access to health care, used narratives to highlight issues that had arisen in their experiences of treating cancer and providing palliative care to Aboriginal and Torres Strait Islanders to reduce the morbidity and mortality from the disease.

The medical oncologist from city cancer centre

Four stories highlighted cultural differences that impacted on communication, informed consent, treatment options and gaining trust.

“When I started my Alice Springs Oncology clinic 12 years ago very few of the patients were Aborigines. Now they constitute a quarter of the clinic. The change seemed to be related to a senior Aboriginal woman who I treated for breast cancer. We got on well and she did well for quite some time. Was that important in the increase in numbers in the clinic or was it just coincidental?”

This experience suggested the importance of developing trust in the community which occurred by a positive experience with a highly respected community member.

“I was doing a ward round at the Royal Adelaide Cancer Centre medical oncology ward one Saturday morning with my intern and a ward nurse. We went to the bed of an Aboriginal patient who had seemed quite comfortable and was usually quite articulate. I asked him how he felt and he curled into a ball and indicated that he wouldn't speak to me. While I was trying to decide what to do next the two women with me pulled the curtains and stepped outside. The man straightened himself up and began to talk to me as normal. I learned later that the man in the next bed, an opal miner from Coober Pedy, had called the nurse aside and told her that the man would not talk to me about his body while women were present. When I reached the opal miner's bed I thanked him for his help. He said simply, “Some of us know some things, and some of us know others”.

The case illustrated the necessity of being able to understand gender and cultural aspects of care.

“Visiting Darwin before we had the telemedicine link between Adelaide and Darwin and doing a ward round with the local physicians I was asked to explain to an Aboriginal patient with liver cancer his chances of responding to doxorubicin. I wanted to tell him that he had about a one in four chance of it shrinking the cancer. He did not seem to understand. I told him that if there were four men and you treated all of them one would benefit. He wanted to know where the other three went. I tried to tell him that they didn't go anywhere and that I was only using an

example. He wasn't to put off that easily and he wanted to know all about the other three. I was digging myself a deeper hole and the deeper it got the more my colleagues were amused.”

Information has to be provided in a form that is understood by the Aboriginal patients with examples that will have meaning for them.

“I was asked to see an Aboriginal woman who was an inpatient in Alice Springs Hospital. The woman had metastatic breast cancer with multiple bone metastases and severe pain in both hips where the lytic lesions were threatening to fracture. I did my best to speak to her. I had been told that she would be uncomfortable if I looked directly into her eyes so I looked everywhere else. I began to talk to her about what we could offer her. She stopped me. She didn't want to hear any more because it was frightening her. At that stage her husband turned up. He told me he was taking her home tomorrow. In the end she agreed to take Tamoxifen tablets. It was a far cry from my ideal of pinning her hips, irradiating them and other painful areas and then offering chemotherapy. I felt that I had failed the patient. The nursing staff tried to reassure me that I had done my best and that agreeing to treat her as she wanted was important and I would probably be asked to see other such patients in the future.”

This case shows the importance of family in decision-making. Clinical authority will need to be shared with such significant family members.

The Darwin oncologist

From the epidemiological work of John Condon and others^{1,2}, there is good evidence that cancer mortality in the Aboriginal population is higher than the rest of the population while the cancer incidence is similar. This is likely to be due to late presentation, poor uptake of treatment, and a higher prevalence of malignancies that tend to have a worse prognosis.

From retrospective reviews of chemotherapy treatment at the Royal Darwin Hospital it is clear that the toxicity of chemotherapy is greater in Aboriginal patients, resulting in greater morbidity and mortality. This is mostly due to the high infective burden they carry and the potential for this to interact with the immunosuppression of chemotherapy. This has resulted in policies being introduced to minimise this complication including preemptively treating Strongyloides, ensuring eradication of scabies and ensuring good skin condition, and providing prompt and appropriate treatment for febrile neutropenia in every patient. It also however behoves us to be more critical in applying evidence collected in well conducted trials in urban populations to the Indigenous population, particularly where the benefits anticipated from treatment are likely to be small.

“A 20 year old young man, who spoke no English, and was from Groote Eylandt, an island approximately 600km east of Darwin was electively admitted in July 2003 to the Royal Darwin Hospital (RDH) with a 12 month history of weight loss, associated with diarrhea, and peri-umbilical pain. He was cachectic, had poor dentition and a distended abdomen. There was no peripheral lymphadenopathy. In many ways he typified the late presentation so often talked about with Aboriginal patients. He

had malabsorption, was hypoalbuminaemic and folate deficient with anaemia and macrocytosis. HIV serology was negative. CT scans demonstrated abnormally large mesenteric lymph nodes and an abnormally thickened small bowel. Endoscopic biopsy of the abnormal duodenum was initially reported as tropical sprue, a condition found in developing countries and resulting in malabsorption from chronic intestinal infection. The mesenteric lymph nodes biopsied were reported as reactive hyperplasia. He was due to be commenced on Doxycycline antibiotic therapy but he was sick of being in hospital and left, without it.

A month later when he re-presented with similar symptoms a review of pathology showed Immunoproliferative Small Intestinal Disease (IPSID), a type of lymphoma, formerly known in the past as heavy chain disease, or Mediterranean lymphoma. The lymphoma is likely to be derived from chronic antigenic stimulation of the gut from intestinal infection by bacteria and parasites. It has been described in two other patients in the NT, both Aboriginal.

He had brief presentations over six months but refused to stay for more extensive investigations. In January 2004, finally, he agreed to come and a family meeting was held which included his father (most significant person, but who needed cardiac surgery in one month), other relatives and interpreters. This was conducted in a slow and methodical fashion such that everyone present would have the opportunity to contribute. The patient however mostly remained silent except when directly questioned. Even then he was not easily forthcoming. A recommendation that he needed both antibiotic therapy and chemotherapy to potentially cure his lymphoma was conveyed and agreed to. This was also discussed with the local doctor at Groote. However the patient left the next day saying that he was concerned about his mother's welfare.

He was admitted to hospital later in the month and was given his first cycle of chemotherapy. His father was also an inpatient at the time with cardiac problems. His brother had died four days earlier following an assault, which the patient had witnessed. Due to this and possibly the effects of steroids given with his chemotherapy he became acutely suicidal and required psychiatric intervention.

He then refused to have any more chemotherapy, although he agreed to continue the Doxycycline, but compliance was uncertain. Numerous attempts to try and talk to him or to organise further family meetings were unsuccessful. This was despite using various resources available including the outreach arms of the Aboriginal liaison teams at community level and palliative care, local health clinic and family.

Despite ongoing symptoms and further family meetings he refuses further chemotherapy and has had no further contact with the hospital except for the Aboriginal liaison officer attached to palliative care.”

I find it difficult to understand why any young man would refuse life saving treatment. However, it is clear that he finds the experience of being in hospital and the process of Western medicine extremely unpalatable. This is likely to be due to cultural and language barriers, and impacts on his ability to take up potentially life saving treatment. We know from the renal dialysis studies that communication can be difficult despite the best of intentions. It is extremely important that interpreters are used, however a better understanding of the Aboriginal concepts of cancer through anthropological study would also be valuable in enabling successful communication

both ways.

There is an epidemic of death in Aboriginal communities often tangibly interacting, with the person dealing with cancer, having to also deal with loved ones dying around them.

Often decisions about treatment, and consent, can be provided only after family consultation with interpreters and needs to involve the most important family member for that patient. This person often gives the consent and any decision made without their involvement is worthless.

The current model of Western health delivery which is based on efficient ward rounds and rapid clinics is not conducive to effective outcomes in Indigenous people who often require continuity of care, significant involvement of family in slow deliberate and repeated discussions, with treatment given closer to, if not at home.

The palliative care physician

As a doctor working in palliative care, I take a long-term view of cancer management. I know that decisions made at earlier stages of a person's illness can have a profound influence on the remainder of that person's life and on their family and community.

Palliative care is all about maintaining a sick person's quality of life, and they determine what that quality of life is for them. In palliative care we generally try to look after people the way they want, where they want and how they want. It's a matter of giving the power to the patients and those who love them. That also helps ensure the care is culturally safe for that person. By cultural safety I mean that a person can use a service given by someone from another culture without risk to their own.

In the Territory, the biggest cultural divide is generally between Indigenous and non-Indigenous people, and currently most doctors and nurses are non-Indigenous people. In order to get the best decisions made, we need to let patients make their own choices. We non-Indigenous health professionals need to acknowledge that we may know very little about our patients, their priorities and their lives. If we don't give sufficient information to the sick person and their family about their condition or its treatment, or we fail to confer on them enough decision-making power, the wrong decisions can be made.

“An Aboriginal man was referred to our palliative care service by the Alice Springs Hospital after he returned from treatment in Adelaide. He was about 35 years of age and had just had surgery and radiotherapy for a cancer of his throat. His larynx had been removed, so he couldn't talk, and he also couldn't eat. He had a tracheostomy which was discharging lots of secretions and had to be cleaned frequently. He had gastrostomy tube and this hadn't healed well, so it was very sore. He was in a lot of pain.

In Adelaide, the decision had been made to have this operation, because without it he would have choked to death, and he had given his consent on paper, with a thumb-mark. He spoke English as a second language and I never found out whether he had an interpreter present when he gave his consent. At any rate, when he got back to Alice, what he really wanted was for all the tubes that were keeping him alive to be taken out. When he heard that this wasn't possible, he was absolutely appalled. So clearly he had never understood properly how mutilated he would be and that he would be left with permanent tubes in his body. He certainly had no idea that he was expected to look after these tubes, the cleaning and the feeding business, himself. He made little effort to do this, finding it difficult and distasteful, and his wife, who apparently had understood that his

operation would cure him, would not, or could not help. He lived in poverty and had little access to health care, so if he and his family couldn't manage, that meant he had to stay in hospital, hardly a good solution.

This man had a miserable end. He wasn't able to be discharged home and after some weeks he died in hospital. He couldn't communicate, both because of language and of his surgery and also because of a hospital acquired infection, so everyone coming to see him had to wear a gown and mask. He seemed really depressed, was too ashamed to go outside and had nothing to do. I finally learnt that he wanted to paint, but it was even difficult to get him paints and brushes in our public hospital. It turned out he was a rather famous painter and I still have the painting he did before he died, a painting of his country.

I have told you his sad story because it doesn't have to be this way. If you give the power to the patient, if you give them the full information, use interpreters and cultural advocates where necessary, and let the right people decide, this sort of tragedy can be avoided."

There are some important issues to consider when helping Aboriginal cancer patients make good treatment decisions. We need to better understand their place in their society and community, the need to work with appropriate family decision makers, the wishes of many Aboriginal patients to remain on their traditional country and the practicalities of care provision in a resource-poor care environment.

Despite the known premature mortality in the Indigenous community, cancer is still a significant cause of death. Indigenous people may develop cancer at a relatively younger age and they are more likely to die from these cancers when compared to non-Indigenous people. They may have young families and many family, social and cultural responsibilities. So their loss is felt very deeply, and someone else will need to do their jobs when they are gone. That might mean they want to try all treatments to keep themselves alive as long as possible, but also that they want to stay on in their communities with their families in the time they have, not to have treatment that takes them far away from home. Then there is the matter of who will look after them, because generally it is these people who look after everybody else.

In Western societies we think of individual people as being "autonomous", that is they are supposed to make their own decisions about their health. Most Aboriginal families make their decisions communally, but there are generally family members who have a special, culturally determined role in making decisions. These are not necessarily the same people who have accompanied the sick person into town to help look after them. Kin relationships are very important; they determine not only who makes the decisions, but also who will accompany and support the sick person when they need to be in hospital for diagnosis or treatment and who will look after them later on. Aboriginal kinship systems are pretty mysterious to most whitefellas, but we don't need to know the anthropology out of a book. What's more useful is to remember not to make assumptions from our own culture about how things should be done and to get the information needed from the person and their family. There is generally someone who will speak for the family, which is the main link you need. So when important decisions need to be made, the right people need to make them and whitefellas won't necessarily know who these people are. To get it right, you might need to arrange family meetings, and maybe talk by phone or video-link to family members still in their community.

Many Indigenous people want to remain on their country during their illness and also when they pass away. That doesn't mean they shouldn't have access to treatments that are only available in city hospitals; it means balancing the benefits of the treatment with the potential burdens and considering practical issues of transport. Again the health care professional should give the information so that the patient and their family can decide.

Many Indigenous people live in poverty and they might not always have good food, accommodation, or even access to running water and electricity needed to keep sick people comfortable. The thing about poverty when cancer care decisions are made is that the doctor in the city may not know the circumstances the person is going home to. So if the person gets a treatment that means they can no longer be looked after at home, it's a big problem. Before the decision is made to have such a treatment, for example a big operation, its outcome needs to be talked over with those who do know, including the sick person and their primary health care workers.

The gynaecological oncologist

I started visiting Darwin and Alice Springs as a visiting gynaecological oncologist in 1988, at the invitation of the specialist gynaecologists, who were referring women with gynaecological malignancies to the nearest centre "South".

One of the big differences to health for women in obstetrics and gynaecology in the Top End has been the Specialist Outreach Service. Single-handedly, Dr Margaret O'Brien has revolutionised care for women in the communities as she travels with her ultrasound machine and her colposcope. This service also means that women have continuity of care and when a woman has cancer or suspected cancer, they are already given support and information without the distress of travel often by plane.

"In one of the communities, we have found a much higher incidence of both cervical and vulvar cancers than we would expect and also in younger women. We talked with the health workers about this and they organised that Margaret and I should visit the community. The plan was for a day of education and colposcopy. Women, who in many cases were already seeing me, were invited to come and bring their relations for a women's health check-up. A feast of barramundi was put on and the response was fantastic. Not much happened in the morning, but after lunch, we found that we saw 17 relations, many of whom only came because of peer pressure. We found three new precancerous lesions. None of these women would ever have travelled to Darwin, so the lesson is that we should keep an open mind to suggestions which may produce unexpected positive results.

"A tribal woman was bleeding from an advanced cervical cancer. She was seen and advised that she would need six weeks radiation therapy in Adelaide. She was not willing to come into Darwin, let alone Adelaide and it was July and cold down south. She continued to bleed and was seen a couple of times. At the last consultation, she was offered a "short course" of radiation. This was not the text book approach, but has been shown to provide good palliation, with improved quality of life. She accepted this and spent one week in Adelaide. She has returned to her community, with no bleeding and no smelly discharge."

For the first few years I was concerned that I was the "hired knife" and did not really feel that I got to know any of my patients in the way I do with my patients in Adelaide, with a feeling for their psychosocial requirements. I felt that I had reached a new level, when I was first greeted at the hospital

outside in the atrium before the consultation as I arrived.

The lesson I have learned is that by consistently coming and offering continuity of service, I am now trusted. Frequently now, I hear "you looked after my aunty or sister", so I hope that makes my advice and treatment accepted more readily.

There are problems which need to be worked on with the Aboriginal communities. For example, there are quite a few cases where people do not keep appointments, not only consultations, but when booked for surgery the next day they do not come, which denies the slot to another patient. There may be cultural and other reasons which stop our patients from attending, in which case we need help understanding how to manage these to best utilise limited resources.

The radiation oncologist

Radiation can be used to cure tumours, preserve organ function such as laryngeal function, prevent recurrence or palliate by relieving pain. In patients treated for cure radiotherapy is utilised in 28 per cent of cases³. It has been shown that Indigenous people need radiation more than the non-Indigenous population because of the mix of tumour types that they have. One difficulty, however, is that the linear accelerators are not portable and because of the staffing infrastructure and population density are situated in major cities. Even radiotherapy opinions can be difficult to obtain from remote areas.

A major problem for Aboriginal patients is whether they are being referred adequately for radiotherapy. When referred they often need to travel long distances from home and have difficulties in adjusting to treatment. There are often problems with travel restrictions on escorts. Differences from home often include the language, the climate, the uncertainty of negotiating multi-story buildings and what support is available

A Model for Engaging and Empowering Indigenous Women in Cancer Screening

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Terminology

In this paper I will use the term Indigenous to refer to Australia's Aboriginal and Torres Strait Islander peoples. I also ask readers to note that Australia's South Sea Islander population is recognised by the Queensland Government. South Sea Islander people have married into and work in the Aboriginal and Torres Strait Islander community. Although I am not writing on behalf of South Sea Islander people or other Indigenous nations, I recognise that issues raised may apply to Indigenous people in other world settings.

General factors

While this paper explores the problem of cervical cancer in Indigenous women, from an Indigenous perspective it really doesn't matter what the health issue is. If we genuinely want to move forward as a community and as a nation, then we need to start thinking about how we practise individually and also as part of a team. Additionally, we need to encourage

for weekends off treatment. Aboriginal people often have duties in their own country that cannot be deferred and will interrupt a course of radiotherapy. Our travel and support services do not accommodate their need for flexible travel. Added to that are the special cultural difficulties if very sick patients die away from home, or patients sent home post radiation who develop subsequent side effects from the therapy.

Conclusions

These cases illustrate issues of communication and the culturally driven differences in decision-making, which impact on the delivery and outcomes of medical care to Aboriginal and Torres Strait Islander communities. The way forward requires recognition of the differences, sensitivity to those differences and a dialogue to plan the way forward. We need to listen better to Aboriginal patients and their families and advocates, and work with Aboriginal colleagues who can complement the things we know with other things that they know.

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others to start thinking about the way in which they work and practise.

We need to explore how to engage the support of others. This will require effort and a commitment to examine our own professional frameworks and their underpinning principles. It will require thinking about and analysing the processes that we use daily to identify and address health issues.

Many Indigenous Health Workers, including myself are tired of being involved in events which end up being nothing more than "talk-fests" where there are no real outcomes, no real strategies to encourage or support people and no commitment or follow-up to make a difference.

The rate of Indigenous women presenting late, dying at young ages and dying in high numbers from cervical cancer is alarming. Furthermore, death from cervical cancer has a negative effect far beyond the affected woman herself; it also affects the physical, social and emotional well-being of the community and destabilises, undermines and impacts on the community's social capital. More specifically, it has an impact on the partners of the women, the family and the extended family, including siblings and children.

Many issues underpin or impact on this health outcome, including the ongoing process of colonisation as it continues to affect Indigenous people. There is the work to address

the appalling rate of death and dying, which usually relies on the goodwill or social capital of the community. And there is the expectation that the social capital in many communities, including Indigenous communities, is alive, robust and healthy.

Indigenous health issues

Evidence demonstrates that Indigenous people die at a much higher rate than the general community, especially from stroke and heart disease, injury, respiratory diseases such as pneumonia and chronic bronchitis, and diabetes (which alone occurs at about eight times the national rate)¹. The gap between the two communities has increased in recent years.

Factors that increase the risk of these disorders in the Indigenous community include higher tobacco and substance misuse rates and poorer nutrition. In addition location and environmental factors impact heavily, such as remoteness from, lack of and barriers to services including health, housing, education, employment and legal support. Often there is lack of access even to clean running water.

The increased incidence and death rates documented for cancer and other diseases have been linked to poor perceptions of health and to social isolation², resulting in withdrawal from community services. Often this withdrawal occurs because people have seen no real improvement in their own health over the years and can foresee no prospect of change to their health or to the systems that ideally should address their health needs. They have no real resources, either material or human and they have become so disillusioned by prior processes and practices, that it is difficult for people not to feel indifferent, or apathetic about their health.

They can see that current services are culturally ineffective and culturally unsafe and they can see that new services and programs are being developed without their input. They know that these services and programs will be equally as

ineffective and equally as unsafe as those already in existence. Yet because they have become so burnt-out, have become so disillusioned, feel so unsupported and have no power or control over the way money is invested and how services are developed, they just give up and refrain from entering into the discussion altogether.

Cervical cancer screening rates

Figure 1 shows the current cervical screening rates according to age in 13 Indigenous Queensland communities compared to those of the general Queensland population. It can be seen that Indigenous rates are much lower, a state of affairs which is unacceptable. Figure 2 demonstrates that the participation rates in cervical screening in these communities vary from as low as 20 per cent up to 65 per cent. The average participation rate in Aboriginal communities is 31.6 per cent and in Torres Strait Islander communities, the average rate is 56 per cent. The average participation rate for 13 Indigenous communities is 41.5 per cent for 1999 – 2000. This rate is below the state average of 56.7 per cent and only one of the 13 communities has a participation rate higher than the state average. For 13 Indigenous communities, cervical cancer mortality rates are at least 10 times higher than the State average³.

The evidence from Queensland demonstrates that Indigenous women are presenting and dying more often and at younger ages from cancer of the cervix, a largely preventable condition. Specifically, epidemiological data from discrete or defined Indigenous communities in Queensland over the period 1982-1996 indicate that the death rate from cancer of the cervix amongst Aboriginal women was 13 times higher than the state average⁴. Data from Torres Strait communities indicate that the death rate was 21 times higher than the state average⁵. Other Australian states and territories also report higher levels of incidence and mortality rates of cervical cancer for Indigenous women⁶.

Cancer Screening Services, part of the Queensland Cervical

Screening Program located within Queensland Health, have worked to improve these figures within Aboriginal communities through the development and implementation of the Queensland Indigenous Women's Cervical Screening Strategy 2000 – 2004.

The lifestyle message

The problem with the 'lifestyle message' approach to health promotion and other internalised messages is that not only do these approaches fail to address the primary determinants of health, they also divert public and policy attention away from more important issues. They also serve to blame individuals and communities for their diseases and illnesses, failing to shore up the support networks needed, including strengthening the social capital of each community.

The effectiveness of such an approach is questionable, particularly when health problems among Australia's Indigenous people are exacerbated by the ongoing process of colonisation, which can be considered responsible for the introduction and provision of unhealthy foods and the destruction of the prior, healthier hunter-gatherer lifestyle.

Colonialism, paternalism and ethnocentrism cause Indigenous roles, systems and processes to be dismantled and fractured, where many Indigenous people are still living on the fringe or living segregated lives at a geographical or emotional distance from family and kin. Assimilation, dislocation, family separation, racism and discrimination are a part of everyday Indigenous life.

Removing the barriers and engaging the community

Barriers to access are created if there is failure to offer culturally safe screening services, or a failure to recognise the need for culturally sensitive follow-up after diagnosis and treatment. Indigenous people need to be involved in setting up these

processes. However, being actively engaged through advisory group representation is not enough. Indigenous people need to be employed in positions which can guide these processes daily. They need to have appropriate wages, a recognised career path and access to ongoing education and training. The process needs to be inclusive.

An effective strategy is to put in place networks and systems which engage and support strong Indigenous voices at the negotiating and decision-making table. But encouraging strong voices can be difficult if people feel powerless and sense that networks and systems are tokenistic. As well, it can become extremely draining if the same person or group of people is approached whenever there is an issue to be addressed or a job to be done. Also, it can cause consternation if there is a sense of urgency, simply because there is funding available yet the issue has not been identified by the community as one deserving priority. This again leads to apathy.

Engaging a participatory process that encourages and supports the community will require continually recognising where the community is at with their own business to allow Indigenous people to have real input. The process will mean that the xenophobic practice of "rubber-stamping", which often stems from government policy and which requires Indigenous people to simply endorse someone else's ideas or notions, will not be tolerated. Rubber-stamping leaves the community disillusioned and apathetic, destroys goodwill and willingness to be involved, leaving no community or no individual to draw upon.

Once an issue is identified, timeframes for action may differ from those of non-Indigenous people. In fact, identifying an issue does not mean that it is appropriate for the community to address the issue immediately.

Building social capital

Research shows that people who actively participate in their community and who have a strong sense of belonging and

Figure 1

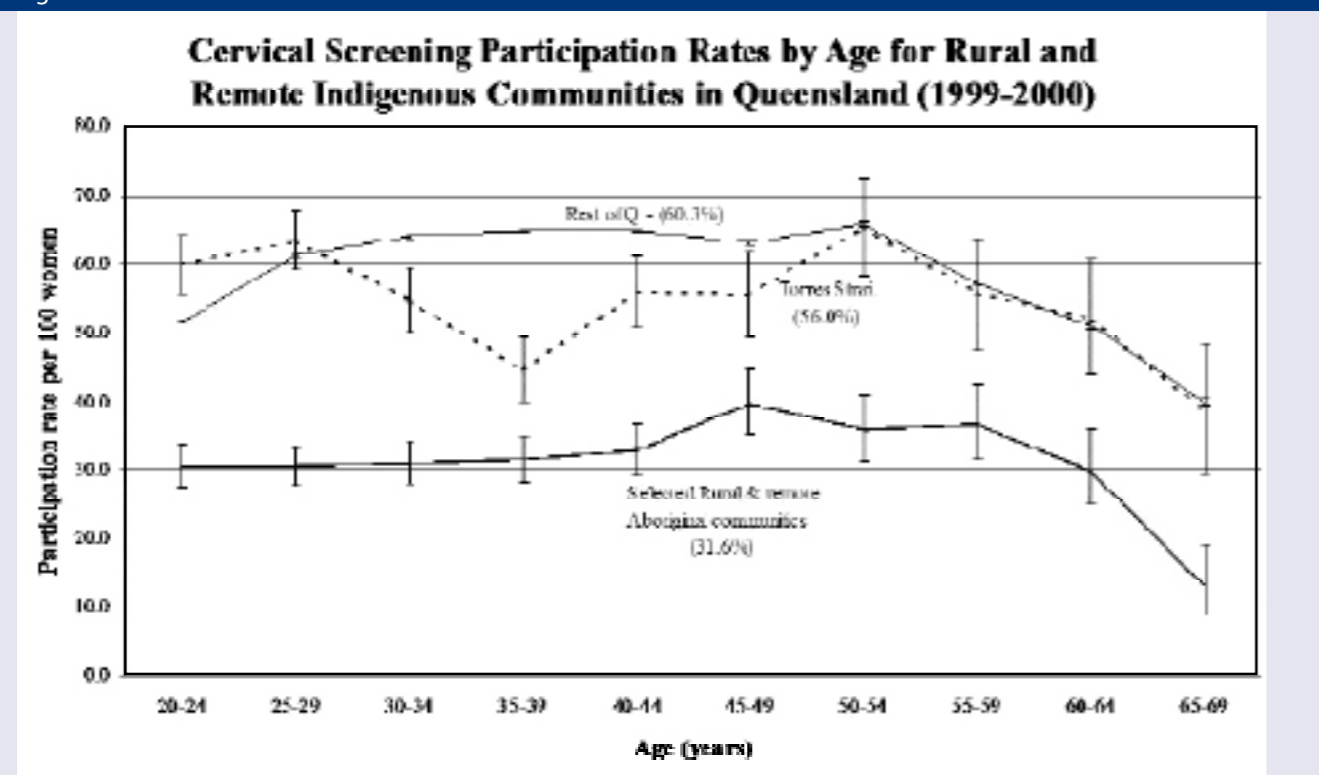
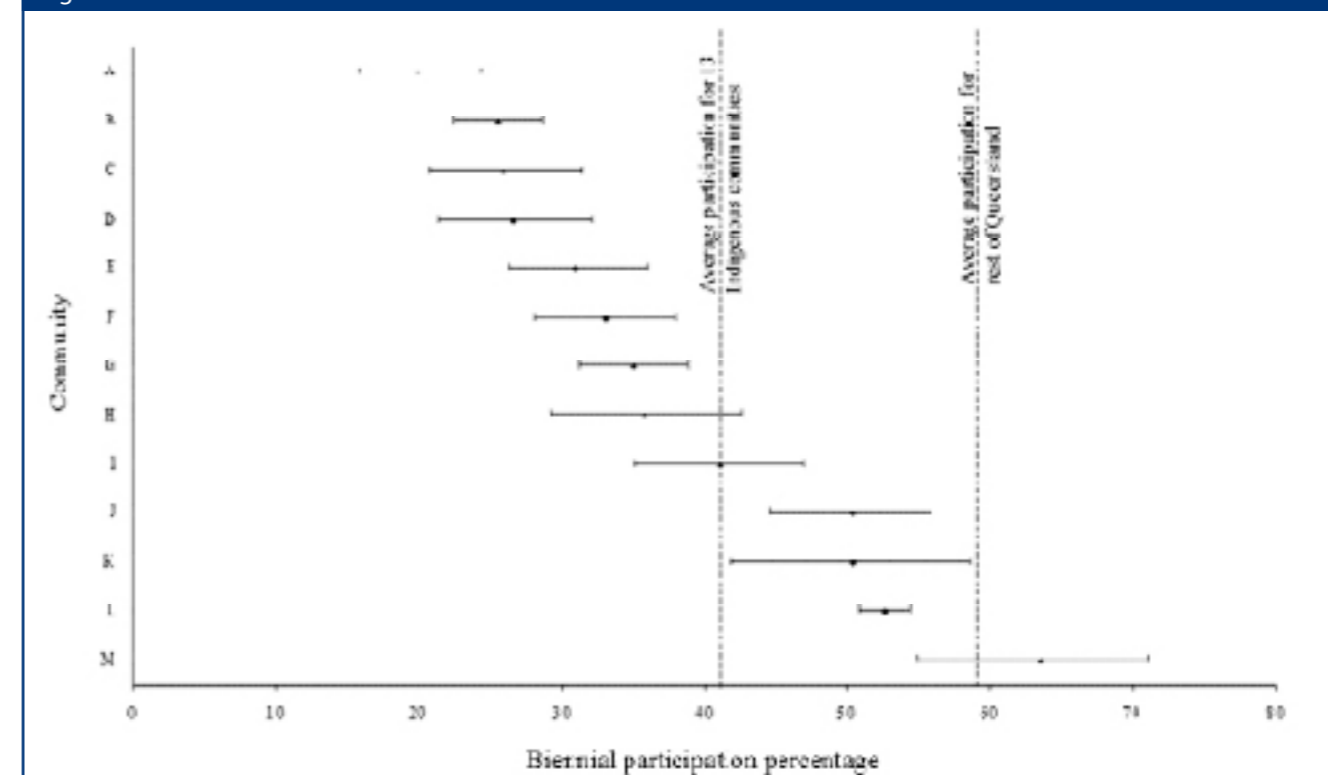


Figure 2



supportive family ties, including cultural and community relationships, have more social capital and more interest in improving their health and attaining better health outcomes, than people who are socially isolated⁷.

For clarification, the term 'social capital' describes features of social life and includes:

- The extent of involvement by people in their community;
- The trust people invest in each other and in governments and institutions; and
- The connections between people and their communities and families.

Social capital also describes how much we can help, or are able to help each other. Government policies and practices have repeatedly interfered in the Indigenous way of life and living, determining that most Indigenous family structures are dislocated. The fact that many people to this day still do not know other family members or where they fit within the community itself, creates feelings of anger and frustration and causes deep heartbreak and often shame.

Other factors contributing to lack of social capital and to a poor health status include: having a lower socio-economic status – or, in other words, having low incomes and no economic base; having high rates of unemployment and a disproportionate level of poor educational attainment; and cultural and ethnocentric barriers to services⁸.

Improving the social capital provides a mechanism to engage and increase genuine participation and it is often only after this process that people become strong in voice and strong in health. Being strong in voice, people are more likely to engage in health planning thus increasing good health and access to services, decreasing mortality rates and morbidity burden and lowering the cost to the health system.

Community capacity development approaches have shown impressive achievements when strengthening social networks, building knowledge and skills and in improving communication among sectors of the community. But how do we do support this practice?

People need to be involved in consultation strategies that support and encourage the community's social capital. Achievements in building social capital are more successful if people have a sense of belonging, a sense of control over research and program development and in having ownership of services and programs.

A strategic approach

The inexcusable rates of cervical cancer in Australian Indigenous women prompted an Aboriginal woman, the late Ms Maureen Kirk, to carry out research in Queensland in order to promote change. Recommendations developed out of Ms Kirk's research were documented in the Queensland Indigenous Women's Cervical Screening Strategy 2000-2004. This strategy began to acknowledge and respect difference, putting in place strategies to remove barriers and to increase access to the cervical screening pathway.

It was after the completion of Ms Kirk's research and with input through genuine participatory action by Indigenous peoples across Australia, that the Queensland strategy was developed, determining and documenting six key action areas to target specific areas of identified need, including the development of

a national code of practice for screening services.

The participatory process to endorse a national code relied strongly on utilising and developing the social capital in many communities. This strategy and the code of practice were endorsed nationally by many Indigenous and non-Indigenous organisations. It took three years to develop the strategy and another three years to develop the service guidelines, but the process and timeframe were strongly supported.

The Queensland strategy has begun to address the imbalance of health outcomes. Four years after its implementation, much work has been done. While many of the key actions have been put into practice and some improvement in cancer mortality and morbidity is evident, some actions are still outstanding. Furthermore, some do not now meet today's health needs; new strategies may need to be developed. This process will depend on input once again from the community and support from other organisations, to assist with the development of the social capital needed to engage the community.

Cervical screening guidelines

The Principles of Practice, Standards and Guidelines for Providers of Cervical Screening Services for Indigenous Women are being implemented nationally.

The guidelines (copies of which are available from The Cancer Council Australia) were developed to help break down some of the access barriers in cervical screening services and seek to better engage Indigenous women in the screening pathway. Readers are invited to be involved in the implementation process and constructive feedback is encouraged.

The guidelines, which are readily adaptable to other services, are being distributed to Indigenous and non-Indigenous service providers and to individuals on request. They include three useful case studies as examples of good practice and an audit tool to help determine gaps in service provision and service delivery.

Conclusion

It is vital to recognise the importance of engaging the Indigenous community in an ongoing, genuine decision-making process by encouraging and supporting the social capital needed in each community. Additionally, Indigenous Health Workers have a unique and important role and there is a need for the development of nationally accredited competency-based education and training program to support them in their role, specifically in the area of breast and cervical cancer.

There are workforce issues, as well as education and training issues for Indigenous Health Workers that require urgent attention. Health worker education and training must be offered locally. The health worker role and the importance of the participatory process to encourage and support the social capital of communities have been recognised by a number of organisations, which have made a commitment to be involved in supporting and further developing the health worker role, including education and training.

Supporting organisations of these needs include the National Aboriginal and Torres Strait Islander Women's Forum, which has health worker representation from each state and territory, the Australian Government through the Department of Health and Ageing, the Office of Aboriginal and Torres Strait Islander Health in Canberra and the Australian Screening Advisory Committee.

Although many people have put forward similar recommendations over the years, the policies, strategies, systems, processes and networks in place today still do not fully address the issues, which are to:

- Recognise the history and stop the ongoing practice of colonisation;
- Stop the "blame the victim" mentality;
- Recognise the importance of and build up social capital within communities;
- Recognise that the community might be burnt-out or apathetic and put in place strategies to address this;
- Value the unique role of Indigenous Health Workers at all levels;
- Advocate for designated women's health roles;
- Ensure you have a code of practice within your own organisation;
- Ensure non-Indigenous staff are culturally respectful and culturally aware;
- Stop racist, discriminative, tokenistic and assimilative policies and practices;
- Stop practices and processes which "rubber-stamp" someone else's ideas;
- Support access to culturally effective and safe education and training;
- Build and maintain equal partnerships;
- Not support or enforce unrealistic or culturally ineffective timeframes; and

- Encourage and support strong (Indigenous) voices at the negotiating and decision-making table.

I encourage all readers to be involved, to make a commitment to make changes and to support the way in which Indigenous people need to work, professionally and culturally. This will require examining one's own professional frameworks, ethics and values, including the principles of practice and of the services offered. It will require thinking about and analysing the processes, systems and policies that we all use daily to identify and address health issues. By doing this, it can make a difference.

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Reducing the impact of cancer in Indigenous communities: ways forward

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Indigenous Australians with cancer are twice as likely to die from the disease than non-Indigenous Australians. Because of this stark imbalance, The Cancer Council Australia recently convened the first ever national discussion forum to address the issue.

Around 120 people from around Australia gathered in Darwin in August 2004 for the forum, "Reducing the impact of cancer in Indigenous communities: ways forward".

Originally conceived by The Cancer Council Australia as an internal event, planning for the forum tapped into a groundswell of concern about the poor outcomes for Indigenous Australians

with cancer. This interest, combined with financial support from the Australian and Northern Territory governments, the National Cancer Control Initiative and The Cancer Council Northern Territory, turned the meeting into a major national event.

Why a discussion forum?

The past two decades have seen a 30% reduction in cancer mortality rates in Australia. However, at a meeting in late 2003, the board of The Cancer Council Australia reflected on the fact that recent successes in cancer control were not shared by Indigenous Australians and that we did not fully understand why.

We were familiar with the rhetoric about limited access to services, cultural barriers and coexisting health problems, but, before we could work towards improving Indigenous cancer outcomes, the problems needed to be better understood.

To this end, we invited Australia's leading oncologists and epidemiologists with an Indigenous focus, academics, Aboriginal health workers and Indigenous cancer survivors to the forum. Organisational support from the National Aboriginal Community Controlled Health Organisation (NACCHO) helped us reach Aboriginal health workers from Australia's most remote communities. The result was an unprecedented sharing

of epidemiological, cultural and anecdotal Indigenous cancer data, with consensus on ways in which stakeholders could work together to effect measurable improvements.

Epidemiology

There is no simple answer to the question of why Indigenous people with cancer die at twice the rate of other Australians with cancer, nor is there a national dataset from which to draw. The inadequacy of data itself demonstrates the extent to which the problem has been overlooked.

However, information gathering on a state and territory basis is improving significantly, particularly in South Australia and the Northern Territory. David Roder (Head of Epidemiology, Cancer Council South Australia) and John Condon (Senior Research Fellow, Menzies School of Health Research) explained that the comparatively high mortality rate is partly the result of Indigenous Australians getting “more than their share” of cancers with poorer survival outcomes, such as cancers of the lung, oropharynx, oesophagus, liver, gallbladder and pancreas. Conversely, Indigenous Australians have lower rates of some of the more curable cancers, such as breast, prostate, bowel and skin cancers.

Delayed diagnoses in Indigenous people also contribute to poor survival rates, along with a reduced likelihood of completing treatment. These problems may explain why Indigenous Australians die at higher rates than other Australians, even when afflicted with the same cancer type. However, the forum also revealed other, less apparent factors.

Penetrating insights

Ngiare Brown (an Aboriginal medical educator and child health specialist with the NT Government) cited institutionalised racism, bureaucratic inaction, and a disconnect between Indigenous and non-Indigenous Australians as the underlying reasons behind the so-called “double burden” of disease suffered by Indigenous people. Brown also reminded the forum of other statistical inequities: twice the rate of low birthweight, and an overall life expectancy 20 years lower than that of non-Indigenous Australians.

A penetrating cultural insight came from Jeremy Baker Balung (an Indigenous man who works as a counsellor for Aboriginal and Torres Strait Islander cancer patients at the Royal Darwin Hospital). Among Baker Balung’s Yolgnu people, each part of the body represents a spiritual link to individual members of the extended family; to have a cancer in a certain organ may be the result of offending the relative whom that part of the body represents. He emphasised the need to respect such beliefs, which are underscored by a deep regard for kin. A person who believes his or her cancer is “payback” for offending a family member may not pursue treatment. Respect and understanding must be reciprocal for people with such strong spiritual convictions; medical practitioners dismissive of time-honoured traditions may be unable to gain their patients’ trust.

Cultural differences go hand in hand with communication barriers. For many Indigenous people, English is the second, third or fourth language, with multiple native dialects predominating in more remote communities. NT epidemiological data show that treatment outcomes are consistently poorer for all cancers in people whose first language is an Indigenous language.

Access and distance

Cancer is a difficult disease to treat remotely, and many Indigenous people live vast distances from urban centres. Sid Selva (Oncologist, Royal Darwin Hospital) described treating patients for whom arduous travel exacerbated the disorientation already induced by their diagnosis. The fact that Selva is the only resident medical oncologist in the Top End underscores a general problem with service provision in regional Australia.

Michael Barton (Deputy Director of Radiation Oncology, Liverpool Hospital), who is author of a study of radiation services in the Northern Territory, expanded on the problems of distance with a reminder about the immobile and high-maintenance nature of radiotherapy hardware.

Such problems reflect overall challenges for healthcare delivery in rural and remote Australia, which are compounded by the cultural, linguistic and socioeconomic barriers unique to Indigenous communities.

Jacinta Elston (Associate Professor of Indigenous Health, James Cook University), herself an Aboriginal woman undergoing cancer chemotherapy, described the practical hurdles for anyone on the cancer journey and explained how they are considerably higher for most Indigenous people: no health insurance or income protection, limited understanding of prognosis and treatment options, the absence of an informed community, unfamiliarity with a hospital environment — all of it bewildering, particular for people already at the margins of Australian society.

Ways forward

The forum sought “ways forward”, and the discussions and workshops mapped out paths towards improving the poor cancer outcomes for Indigenous people.

Consistent throughout was the need for allied health agencies to form collaborative partnerships with Indigenous organisations and individuals. Our ignorance of complex yet imperative cultural and linguistic issues was laid bare at the forum and supported by the latest data. Only by engaging with people like Jacinta Elston and Jeremy Baker Balung in interface roles will we be able to break down these barriers.

In response, The Cancer Council Australia is inviting Indigenous representatives to join its principal committees, is seeking to co-opt an Indigenous Australian onto its board, and is discussing a memorandum of understanding with NACCHO.

Options will be examined to boost research on cancer in Indigenous people, ensuring it is undertaken with liaison officers and developed in ways that will give ownership of the data to Indigenous people, many of whom have reason to be sceptical about research, given the history of European paternalism.

Increased collaboration should be enhanced by efforts to build the capacity of the Aboriginal health workforce. Much will depend on government funding, and improved cancer control in Indigenous communities has now become a key cancer council advocacy goal. The signs are encouraging: the Coalition’s pre-election cancer policy included a national bowel cancer screening program, targeting Australians aged from 55 and Indigenous Australians aged from 45, indicating a shift towards policy adjustments consistent with the poorer health

outcomes of Indigenous people.

Cancer Councils and their allies will also work towards factoring Indigenous issues into policy development and promotion at every step in the cancer journey, from prevention to palliation.

There is no better example of the challenges of cancer prevention than smoking prevalence: 50% of the Indigenous population smokes, compared with about 20% of non-Indigenous Australians. To reduce this figure, again we must connect with Indigenous people and involve their organisations and communities in spreading the public health messages.

The need to formally involve Indigenous people in service design and delivery also applies to cancer screening programs. Already there are signs of improvement, with targeted Pap smears contributing to a 50% fall in Indigenous cervical cancer mortality in the late 1990s.

Palliation is also critical, particularly among people with such high rates of mortality and premature death. The Cancer Council Australia will look at educational tools to assist in the management of pain, dying and death among Indigenous communities.

Our commitment is already well supported at state and

territory level. The Cancer Council New South Wales’ recent employment of an Aboriginal liaison officer based in Dubbo and the release of a cancer information kit for Aboriginal health workers are excellent initiatives that could be applied nationally.

These are all small steps towards a distant destination. But only through setting and achieving shorter-term goals will we be able to make an impact on the appallingly poor state of cancer outcomes for Indigenous Australians.

The discussion forum reiterated the overarching themes of dispossession, hopelessness, grieving, racism, paternalism and abject socioeconomic status — seemingly insurmountable problems, but not when addressed with the sense of purpose, cooperation and strategic thinking evident at the recent national forum.

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An evaluation of support groups for young women with early breast cancer

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Abstract

This study evaluated the efficacy of a support group for young women with a diagnosis of early breast cancer. Participants were 44 women ranging in age from 23 to 50 years (mean = 40 years) who attended a ten-session support group held at one of two metropolitan teaching hospitals. Participants completed a pre- and post-group evaluation package. Significant decreases in psychological distress at completion of the program were observed ($t = 3.44$, $p = 0.001$). Those with higher levels of distress at baseline reported significantly greater decreases in distress at the post-group assessment compared to women with lower levels of psychological distress. Overall no changes were found for social support ($t = 0.77$, $p = 0.44$), although women with low levels of social support at baseline showed significant increases in perceived social support at completion of the program compared to those with higher levels of social support. No changes were observed for self-esteem ($t = -0.55$, $p = 0.58$); however, those with lower self-esteem before the group commenced showed greater increases in self-esteem compared to those with higher levels at baseline. None of the sociodemographic variables examined (age, marital status and having children or not) predicted improvement from the support groups. The clinical implications of the findings are discussed.

Introduction

Approximately 10,000 Australian women are diagnosed with breast cancer each year and in NSW in 1999, 3,463 women were newly diagnosed with breast cancer.¹ Women under 50 years of age account for approximately 26 per cent of all new cases of breast cancer in Australia.² Research indicates that young women have unique needs in terms of potential impact of treatment options on fertility and sexuality, the interruption of career, financial concerns and how to cope with young children.³

A number of studies have found that younger age is a risk factor for the development of psychosocial morbidity in women with breast cancer and is associated with increased morbidity across all phases of diagnosis and treatment.⁴ Younger women report higher levels of emotional distress, more unmet practical needs, more financial distress and greater disruption to their daily lives following treatment for breast cancer.⁴ Dunn and Steginga suggest a number of reasons why young women with breast cancer may experience increased psychosocial morbidity compared with older women.³ From a developmental perspective, younger women with breast cancer experience the stress of cancer concurrent to the multiple stressors associated with the early stage of the family life cycle.³ Also, younger

women have been found to experience more disruption to self-image and sexuality.³ Subsequent infertility as a consequence of cancer treatments may also negatively affect the younger woman's self-concept.³ In addition, younger women may experience premature menopause as a result of ovarian toxicity from chemotherapy, resulting in distressing physiological and psychological symptoms, which may include vaginal dryness, hot flushes, dyspareunia, mood swings and short term memory loss.³

Hughson and colleagues studied women for a period of two years following mastectomy and found that depression, anxiety and irritability were significantly more common in women younger than 50 years of age, compared with women over 50 years, and with a control group.⁵ In another study assessing the effects of mastectomy,⁶ younger women were identified as being at greater risk for developing poor mental health and as being more likely to experience a deterioration in well-being. A large study of women commencing chemotherapy or radiotherapy also found younger age to be associated with lower levels of emotional well-being.⁷ Bloom and Kessler found that being younger and having more children under the age of 21 years were predictive of women experiencing greater psychological morbidity after breast cancer treatment.⁸ The authors highlighted that younger breast cancer patients experience greater affective distress in the first year following diagnosis and at 5-year follow-up than do those who are older with comparable disease severity, apparently due to the greater fear of recurrence and the presence of competing care-giving demands.⁸

Dunn and Steginga also found that, consistent with previous research, younger women reported fears about not surviving to see their children grow up, about loss of fertility, or about not being able to have children because of concerns about future cancer recurrence.³ The women also described feeling that they were too young to get breast cancer and that they felt marginalised and isolated. In a qualitative study of very young women (aged less than 36 years) with early stage breast cancer, feelings of isolation and being different were identified as one of the predominant stressors.⁹ Other significant stressors experienced by these women were: coping with the untimeliness of the diagnosis; their feelings about the impact of the illness on their partner and on their relationship with their partner; sadness about lost opportunities for childbearing; uncertainty about their future; and anxiety about the impact of the illness on their children. In this study, several women spoke about their experience of attending breast cancer support groups and not feeling a sense of connection with the older women they encountered there. Instead of gaining a sense of normality and mutual support from participating, they often felt even more isolated.⁹

Thewes and colleagues conducted a preliminary qualitative study to assess the on-going psychosocial needs of breast cancer survivors and compare the needs of younger versus older breast cancer survivors.¹⁰ A wide variety of on-going psychosocial and information needs were reported by breast cancer survivors in the first two years after diagnosis, including support needs, psychological needs, practical needs, physical needs and information needs.¹⁰ Younger women reported more needs than did older women, and many of these directly related to being younger or pre-menopausal at the time of diagnosis.¹⁰ Younger women identified the impact their diagnosis and treatment had on their lifestyle and career as a concern and pre-menopausal

women spoke about a number of gynaecological late-effects of treatment.¹⁰ A number also reported a lasting impact on their intimate relationships and sexuality.¹⁰ The impact of treatment on fertility, and information about choices for contraception, were major concerns identified by younger women¹⁰. All of the women who had sought information about fertility felt that the information that they received was conflicting or inadequate.¹⁰ The youngest sub-group in this study (<36 years) spoke about isolation or a sense of being alone as a younger woman treated for breast cancer.¹⁰ There was a perception that support groups did not cater to the needs of younger women, or that they were for terminally ill people.¹⁰ Whereas older women spoke about the educational benefits of attending support groups as well as emotional support, younger women emphasised the social and emotional aspects of attending support groups, and the younger women reported more need for emotional support from professional counsellors.¹⁰ The findings of this study highlighted a strong need for young women to access other breast cancer patients of their own age.¹⁰

A number of authors have argued that the provision of appropriate support services that cater to the specific needs of young women is important.^{3,11} In Dunn and Steginga's study, the supportive intervention most commonly endorsed by young women was peer support, which was seen as providing them with an opportunity to meet and share experiences with other young women with breast cancer.³ The authors (p.144) state that 'group interventions that provide women with breast cancer with the opportunity to compare themselves with others in a similar situation can assist by normalising women's feelings of distress, and assisting women to develop resilience in the face of adversity. For this particular target group (i.e. younger women), peer support programs, professionally supported and supervised, are a priority'.

We recently carried out a systematic literature search using MEDLINE, PsychINFO, and EMBASE of studies, published in a peer-reviewed journal in the English language, which described a group therapy program for women with breast cancer, provided qualitative outcome data and had a prospective design (with a pre- and at least one post-counselling assessment) or a randomised controlled trial design. This systematic search of the literature demonstrates a large knowledge base on the efficacy of support groups for women with breast cancer.¹²⁻⁴¹ This systematic review supports earlier reviews that have found that group psychosocial interventions provide psychological benefits for women with breast cancer.^{42,43} Most studies assessing the efficacy of psycho-educational groups have demonstrated improvements in mood disturbance for groups of women with early breast cancer³⁵ or mixed stages of breast cancer.²² Only two of the psycho-educational studies reviewed showed limited or no reduction in mood disorder, but both found positive effects as assessed by a measure of benefit finding.^{12,15} The positive effects of psycho-educational interventions have been demonstrated over short-term^{17,22,28,35} and longer-term periods^{22,28,35}.

Although the unique psychosocial impact of breast cancer on younger women has been identified by a number of researchers,^{3,7,9,10,44-49} and a number of authors have suggested that the needs of this group of women would be best addressed by the provision of groups specifically designed for younger women,^{3,10,49,50} very little work has been conducted to date with this group of young women.

The systematic literature search found no studies evaluating the outcomes of psychosocial group therapy for groups of younger women, however two studies describing the content

of groups for young women were identified. Smeardon describes a British group program for women under 55 years of age with breast cancer.⁵¹ Psycho-educational groups, aimed to reduce psychological morbidity in young women with breast cancer, were conducted for 2 hours weekly over a 6-week period. Although formal evaluation was not reported, informal evaluation indicated that young women identified the opportunity to network with women in a similar situation as one of the most important aspects of the group and that they found the educational input and the overall support from the group to be beneficial.⁵¹ A large project in California has commenced to develop and evaluate a psycho-educational group intervention for young women newly diagnosed with breast cancer.⁵² This includes a 10-week psycho-educational group program for women 50 years and younger, and initial feedback has found that 87 per cent of participants rate the intervention as helpful.⁵² The majority of women in the study rated 'being able to talk/relate to the other women' and 'emotional support' as most helpful, and also found the provision of education and information to be helpful.⁵²

Given the dearth of empirical data in this area, this study is assessing the efficacy of a support group for younger women diagnosed with early stage breast cancer. The study tests the following hypotheses: (i) there will be significant improvements in psychological outcomes relative to baseline; (ii) women with lower social support, lower self-esteem and higher psychological distress at baseline will experience greater improvements in each of these outcomes; (iii) younger women will experience greater improvements in psychological outcomes as will women without a partner. Outcomes will also be dependent upon whether or not women have children.

Methods

Participants

Participation in the support groups was open to young women receiving treatment for early stage breast cancer at two treatment centres in Sydney. Women were referred to the group support facilitator by health care providers at the two treatment centres (the NSW Women's Breast Centre, a joint service of the Royal Hospital for Women and the Prince of Wales Hospital, and the Mater Hospital). Ethics approval was obtained from the two institutional ethics committees. Following referral women were telephoned by the group facilitator for a pre-group interview. All young women were eligible to participate, using a functional definition of young as developed by Dunn and Steginga that is not contingent upon chronological age, thereby avoiding the pitfalls of an arbitrary cut-off.³ Three indicators were utilised for defining young as applied to women with breast cancer: (i) the woman is of childbearing age; (ii) the woman has young children, that is, children not yet at secondary school; or (iii) the woman has not yet reached menopause.³

A combination of CBT and mutual aid formed the theoretical framework underpinning the group program.⁵³ The groups were facilitated by a Clinical Psychologist with training in group facilitation (BT) and co-facilitated by a specialist breast care nurse, social worker or pastoral care worker. The group support program consisted of ten fortnightly sessions, offered on weekday evenings. The number of group participants was limited to twelve. The first session consisted of an introduction to the program and ice-breaker activities. Baseline questionnaires were collected prior to the first therapeutic session. The nine therapeutic sessions covered the following topics: (i) post-treatment issues and recovery from breast cancer; (ii) feeling good about yourself; (iii) coping with fear,

sadness, stress and worry; (iv) lymphoedema; (v) fertility and early onset menopausal symptoms; (vi) dealing with the impact of breast cancer on relationships and communication; (vii) complementary therapies in breast cancer; (viii) body image, sexuality, and the impact of breast cancer on intimate relationships; and a final session (ix) 'how far have I come' and 'where to from here'. Post-group questionnaires were completed after the last session. Reminder calls were made as required to obtain post-group questionnaires.

Demographic characteristics

At baseline, age, educational level, marital status, number of children and disease related variables were assessed.

Measures

Profile of Mood States (POMS) - Brief Form

The Profile of Mood States has been widely used in intervention studies with breast cancer patients for measuring mood outcome.⁵⁴ The POMS Brief Form is a 37-item questionnaire,⁵⁵ which contains six mood-related subscales: anxiety, depression, anger, vigour, fatigue and confusion. A Total Mood Disturbance Score is calculated by adding together scores on the other five subscales and subtracting vigour. On all subscales except vigour, a higher score indicates poorer outcome. High internal consistency and test-retest reliability has been reported for each of the six subscales.⁵⁴

The Coopersmith Self-esteem Inventory - Adult Form

This is a 25-item unidimensional self-assessment instrument measuring self-esteem.⁵⁶ It has been widely used in a range of research trials and in intervention studies with breast cancer patients¹⁸ and has adequate psychometric properties.⁵⁶ Scores range from 0 to 100 and higher scores denote greater self-esteem.

The Duke UNC Functional Social Support Questionnaire (DUFSS)

The DUFSS is an 8-item, 2-scale questionnaire that assesses four content areas: quality of support, confidant support, affective support and instrumental support. Factor analysis demonstrates that it assesses two dimensions of social support: affective support (three items) and confidant support (five items).⁵⁷ Reliability and validity data have been reported and are satisfactory.⁵⁷ Scores range from 8 to 40 and higher scores denote greater social support.

Satisfaction with group intervention

As well as the psychometric measures, post-group questionnaires included 18 purposively designed items assessing satisfaction with aspects of the group program. Response options ranged from 'strongly agree' to 'strongly disagree'. Scores ranging from 1 to 5 were allocated with higher scores denoting greater satisfaction. A mean satisfaction score was calculated by adding all individual scores and dividing by the total number of scores.

Statistical analyses

A significance level of $p < 0.05$ was used for statistical tests. Due to the limited sample size, differences in outcome between women seen at different treatment centres were not explored. For normally distributed related continuous variables, paired t-tests were conducted. For non-normally distributed related continuous variables, Wilcoxon matched-pairs signed rank tests were performed to test whether there were any

changes in patient outcomes from baseline to follow up. To test whether women with lower social support, lower self-esteem and higher psychological distress at baseline would experience greater improvements in each of these outcomes, linear regressions were used to regress the follow up values on the baseline values for each set of outcomes. Each regression was examined to ascertain whether the confidence intervals around the regression coefficient did not include 1.0 and that the coefficient was significantly smaller than 1.0. To test whether marital status and whether or not a woman had children predicted patient outcomes, Mann-Whitney U tests were conducted for non-normally distributed dependent variables and independent t-tests were conducted for normally distributed variables, using change scores.

Results

Characteristics of the sample

Of the 53 women who participated in the support groups, none declined participation in the questionnaire assessment. Five women completed only the pre-group assessment and four only the post-group questionnaire, leaving a total of 44 women who completed both questionnaires and were included in the analysis (participation rate for both questionnaires was 83 per cent). Twenty (45 per cent) of the participants had attended groups at the NSW Women's Breast Centre, and 24 (55 per cent) at the Mater Hospital. The mean age of the sample was 40 years, ranging from 23 to 50. Eighty-six per cent had education beyond high school, compared to 37 per cent of women in the general Australian population,⁵⁸ indicating above-average educational levels. These high educational levels could at least in part be a reflection of the catchment area of the two treatment centres where the groups were conducted.

Women were diagnosed between one and 12 months prior to commencement of the group (mean = 4 months). Table 1 summarises the sociodemographic and disease related variables.

Changes in patient outcomes relative to baseline

Variable	Level	N	per cent
Sociodemographics			
Age (years)	< 30	1	2
	30-39	18	41
	40-49	24	55
	50+	1	2
Marital status	Married	31	74
	Not married	11	26
Educational level	Post-school	37	86
	No post-school	6	14
	Type of surgery (a)	Lumpectomy	27
Adjuvant treatment (a)	Unilateral mastectomy	20	45
	Bilateral mastectomy	4	9
	Breast reconstruction	7	16
	Chemotherapy	36	82
Radiotherapy	Radiotherapy	31	70
	Tamoxifen	28	64
	Zoladex	5	11

(a) Some women had more than one type of surgical

Table 2: Mean psychological outcome scores by testing group

Measure	Baseline			Post group			Z/t value	P value
	N	M	(SD)	N	M	(SD)		
POMS (total score)	42	20.7	(21.5)	43	9.4	(18.9)	3.44	0.001
Anger (a)	42	3.3	(4.0)	43	2.2	(3.5)	2.31	0.026
Tension (a)	43	5.2	(4.6)	43	4.3	(4.0)	0.82	0.42
Vigour (b)	42	8.5	(5.7)	43	10.8	(4.8)	-2.59	0.013
Depression (a)	42	5.5	(6.0)	43	2.9	(3.5)	-2.39	0.017
Fatigue (a)	42	9.5	(5.8)	43	6.6	(5.4)	3.22	0.003
Confusion (a)	42	5.5	(3.9)	43	4.3	(3.6)	2.08	0.044
DUFSS (total score) (c)	44	33.2	(5.4)	43	32.6	(5.2)	0.77	0.44
Affective support	44	13.1	(2.0)	43	12.1	(2.3)	-2.56	0.10
Confidant support	44	20.1	(4.1)	43	20.4	(3.6)	-0.030	0.98
Coopersmith Self-Esteem Inventory	43	71.6 (18.1)	42	72.7	(17.7)	-0.55	0.58	

(a) Higher scores signify greater distress. (b) Higher scores signify greater vigour. (c) DUFSS = Duke UNC Functional Social Support Questionnaire.

At baseline, the means for the psychological outcome measures were as follows: Profile of Mood States (total mood disturbance score) - 20.7 (SD = 21.5), DUFSS - 33.2 (SD = 5.4), and Coopersmith Self-Esteem Inventory - 71.6 (SD = 18.1). At the post-group assessment, the means for the psychological outcome measures were: Profile of Mood States (total mood disturbance score) - 9.4 (SD = 18.9), DUFSS - 32.6 (SD = 5.2), and Coopersmith Self-Esteem Inventory - 72.7 (SD = 17.7). Table 2 summarises means and standard deviations for all psychological outcome variables.

Improvements of psychological outcomes relative to baseline (Hypothesis i)

Paired samples t-tests showed a statistically significant decrease in psychological distress from baseline to follow up ($t = 3.44$, $p = 0.001$). Significant decreases were found for fatigue ($t = 3.2$, $p = 0.003$) and depression ($z = 2.90$, $p = 0.006$), and a significant increase in vigour ($t = -2.59$, $p = 0.013$). No changes were observed for the anger ($t = 2.31$, $p = 0.026$), tension ($t = 0.82$, $p = 0.42$) and confusion ($t = 2.08$, $p = 0.044$) subscales of the POMS. No significant changes were found for social support ($t = 0.77$, $p = 0.44$) and self-esteem ($t = -0.55$, $p = 0.58$).

The mean satisfaction score was 4.4 (SD=0.47), indicating very high satisfaction with the group. Table 3 shows the means and standard deviations for all satisfaction items.

Baseline levels of psychological distress as predictors of improvements (Hypothesis ii)

Women with higher psychological distress at baseline showed greater decreases in psychological distress at the post-group assessment compared to women with lower psychological distress ($b = 0.312$; 95 per cent CI 0.003-0.487). Women with lower social support at baseline showed significantly greater increases in social support at post-group assessment compared to women with higher social support ($b = 0.505$; 95 per cent CI 0.222- 0.740). Women with lower self-esteem at baseline were more likely to increase their self-esteem at the post-group assessment compared to women with higher self esteem ($b = 0.657$; 95 per cent CI 0.413-0.900).

Association with age, and having a partner and children (Hypothesis iii)

Table 3: Means and standard deviations for satisfaction items

Item	Mean	SD
I would recommend the group to other women in my situation	4.8	0.45
I think the group was well facilitated	4.8	0.39
I think the group covered topics which were appropriate to young women with breast cancer	4.7	0.46
The Younger Women's Cancer Support Program met my expectations	4.5	0.86
I feel more supported as a result of attending the group	4.5	0.80
I have learned more about the emotional impact of breast cancer as a result of attending the group	4.5	0.66
The pre-group interview prepared me about what to expect from the group	4.4	0.67
Attending the group has had a positive impact on my life	4.4	0.74
I think the venue for the group was appropriate	4.4	0.79
I think the length of time allowed for meetings was appropriate	4.4	0.66
I feel less isolated as a result of attending the group	4.3	1.01
I have learned strategies to help me feel more positive about the future as a result of attending the group	4.3	0.82
I think the meeting time (i.e. weekday/ afternoons-evenings) was appropriate	4.3	0.96
I have learned more about breast cancer and its treatment as a result of attending the group	4.2	0.83
I feel I have been able to help or support other members of the group as a result of attending the group	4.0	0.57
I have learned strategies to better manage my fears as a result of attending the group	4.0	0.76
I have learned strategies to resolve relationship or communication problems which may have occurred during or after my treatment as a result of attending the group	3.8	0.76

No significant associations were observed for changes in psychological distress depending on women's age ($r = 0.017$, $p = 0.91$), and whether or not they had children ($t = 0.42$, $p = 0.68$) or a partner ($t = 0.13$, $p = 0.90$). Likewise, a test for an association between changes in social support and age showed a trend for significance ($r = -0.30$, $p = 0.052$), and having children ($t = -2.01$, $p = 0.84$) or a partner ($t = -0.71$, $p = 0.48$) were not significantly associated with changes in social support. No significant correlations were observed for changes in self-esteem depending on age ($r = 0.015$, $p = 0.93$), having children ($t = -0.26$, $p = 0.80$) or being partnered ($t = -1.55$, $p = 0.88$). None of the significance tests for associations between satisfaction with the group depending on age ($r = 0.18$, $p = 0.28$), having children ($t = -0.91$, $p = 0.37$) or a partner ($t = 0.17$, $p = 0.87$) were significant.

Discussion

This study evaluated the efficacy of a support group for young women with a diagnosis of early breast cancer. Psychological outcomes assessed were psychological distress, self-esteem and perceived social support. Consistent with our hypothesis (i) that there would be significant improvements in psychological outcomes relative to baseline, we found that participation in a group program evaluated by this study for young women with early stage breast cancer resulted in a significant decrease in psychological distress.

Although the authors know of no other group intervention evaluation conducted exclusively with young women with breast cancer to date, the finding of reduced psychological distress in women with early stage breast cancer following participation in a short-term support group is consistent with a growing number of previous studies of women of mixed ages.^{17,33,35} Previous randomised controlled trials with women with mixed or unspecified stages of breast cancer^{21,22,28-30,39} have also showed reductions in psychological distress following participation in support groups, as have studies with women with more advanced cancer.^{18,24,59} However, not all group intervention studies have shown reductions in psychological distress in women with early stage breast cancer.^{12,15} Interestingly, a study conducted by Spiegel and colleagues failed to find improvements on a number of psychometric measures of emotional well-being at the end of a 12 week supportive-expressive group therapy program for women with early breast cancer, but significant improvements were evident at six and 12 months relative to baseline assessments.³⁸ Inconsistent findings across studies could be the result of variations in the length of group programs and differences in when women join the group (ie. shortly after diagnosis or towards the end of treatment).

Women with higher psychological distress at baseline showed greater decreases in psychological distress at the post-group assessment compared to women with lower psychological distress. The increased reductions in psychological distress found for those women who were most distressed at pre-group assessment indicates that those women who were most in need of psychological intervention made greater gains than those who were less distressed. These findings are similar to findings in a study of women with metastatic breast cancer, which found that women who were more distressed benefited from a group intervention, compared to those who were less distressed, who, in that study, did not benefit from participation.²⁴

On average, social support was not significantly improved by participation in the group. Although the potential for oncology

support programs to assist women to increase their social support networks, to use their support network more effectively and to maintain quality in their interpersonal relationships, has been clearly documented,⁶⁰ the effect of group interventions on perceived social support is far from clear. Some studies have found no improvement in perceived social support from group support programs,^{17,20} while others have found the effects to be dependent on pre-group social support levels.²⁶ Fobair and colleagues found, in a study of a supportive group for lesbians with primary breast cancer, that perceived social support declined following group participation.²¹ The authors suggested that the participants may have become more critical of the levels of support provided to them by their social networks as contact with other women in similar situations led them to raise their expectations regarding social support.²¹ Factors such as these may account for our finding that perceived social support was not significantly improved overall by participation in the support group.

Our finding that women with lower social support at the commencement of the group program showed significantly greater increases in social support following the support group, compared to women with higher social support at baseline is consistent with other group intervention studies. Fobair and colleagues found that people who experience problems with stress or social isolation or are in need of social support are those most likely to benefit from participation in groups.²¹ Hegelson and colleagues in a comparison of educational and peer support group interventions, found that women who lacked emotional support from their partners, or who reported more negative interactions with their partners, benefited from peer support groups.²⁶

On average we found no changes in self-esteem resulting from the support groups; however, we did find significantly greater increases in self-esteem for women with lower self-esteem before the group commenced compared to women with higher self-esteem. The previous literature on the efficacy of support groups on self-esteem is inconsistent. Edelman and colleagues found improvements in self-esteem in women with early stage breast cancer following group therapy,¹⁷ as did Hegelson and colleagues in women with mixed stages of breast cancer. However, studies conducted with women with more advanced breast cancers have shown mixed results with regard to self-esteem.^{18,25,31,36} These inconsistent results suggest that the impact of support groups on self-esteem may be more complex than has previously been anticipated. Future research should seek to clarify the patient characteristics and types and duration of group therapy most likely to lead to increases in self-esteem.

Hypothesis (iii) that women would experience greater improvements in psychological outcomes depending on their age and whether or not they have a partner, or children, was not supported. The lack of significant associations between these sociodemographic variables and the benefits obtained from the support group may reflect the different, but not lesser, concerns of women in different life circumstances. While we found no association between these life variables, pre-group psychological distress and perceived social support predicted psychological outcomes, suggesting that psychological characteristics are more powerful predictors of benefit from support groups than sociodemographic variables. The authors are not aware of previous studies that have examined the associations between these sociodemographic variables and improvement from support groups and future studies should

seek to replicate our findings.

In interpreting the findings of our study the strengths and limitations of this study should be noted. Although to our knowledge this is the first study to provide empirical data on the effect of a support group conducted specifically for young women, the number of women in this sample is small. Despite this, statistically significant improvements were found in levels of psychological distress following group participation. The sample was a highly educated group compared with the general Australian population, which may limit the generalisability of the findings. It would also be of interest to explore the effect of group participation for women from differing cultural backgrounds by evaluating the efficacy of culture-specific support groups. A pre-and post-intervention design, rather than a randomised control design, was utilised for this study. Previous research has shown that women with breast cancer improve on psychosocial measures even without psychosocial intervention,⁴⁴ so further research with young women using a control group design would overcome this limitation. Post-intervention measures were conducted following completion of the group and further longer-term follow-up would be of value in ascertaining whether gains were sustained over longer periods, as previous studies have shown mixed results in terms of the sustainability of psychological benefits of support groups for women with early-stage breast cancer.^{17,35,38}

Clinical implications

The finding that women who participated in a psychoeducational group for young women with early stage breast cancer experienced a significant decrease in psychological distress supports suggestions that these women, who are at high risk of psychosocial morbidity, will benefit from age-specific support groups. Women who were most distressed before participation in the group program experienced significantly greater improvements on a number of measures than women who were less distressed, indicating that the program was of particular benefit to those women with a greater need for intervention.

The provision of this short-term group intervention for young women was conducted with relatively limited resources. This approach thus provides cost-effective, accessible psychosocial support and promotes opportunities for young women to meet with others of their own age in similar circumstances, reducing the sense of isolation that many young women experience when faced with a diagnosis of breast cancer.

Acknowledgments

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REPORTS

Support for Research 2005

The state and territory cancer organisations, which comprise The Cancer Council Australia, are the major sponsors of cancer research and related activities in Australia. Grants are made following competitive, peer-reviewed assessment of funds derived from donations and bequests.

In 2005 the value of these grants is over \$26.5 million.

In addition, the grants for breast cancer research made by the National Breast Cancer Foundation are listed. The Foundation has been established by the Federal Government, with an independent Board of Trustees to encourage research in all aspects of breast cancer.



THE CANCER COUNCIL AUSTRALIA

Research grants

J Heath Director of Clinical Research, Royal Children's Hospital, Melbourne	Assisted reproductive technology and childhood (embryonal) cancers	\$40,000
P Marlton Head of Leukaemia and Lymphoma Services, Princess Alexandra Hospital, Brisbane	High dose cytarabine and fludarabine without anthracycline for patients with core binding factor acute myeloid leukaemia (CBF AML)	\$20,000
TOTAL RESEARCH FUNDED		\$60,000



THE CANCER COUNCIL ACT

Research grants

D Yip, P Craft, R Stuart-Harris, A Davis, N Goddard The Canberra Hospital	A clinical trials cancer research program	\$33,700
N Druhan - commissioned by The Cancer Council ACT	Toward a comprehensive cancer prevention and early detection program for the ACT and SE NSW region	\$20,000
TOTAL RESEARCH FUNDED		\$53,700



THE CANCER COUNCIL NSW

New Research Project Grants

L Khachigian University of New South Wales	DNAzymes as Novel Inhibitors of Human Basal Cell Carcinoma Growth	\$65,500
K MacKenzie Children's Cancer Institute Australia for Medical Research	Characterisation of a novel mechanism that prevents immortalisation and malignant transformation	\$123,948
R Fulton University of Sydney	Motion Compensation in FDG PET Imaging for Improved Cancer Diagnosis and Treatment	\$82,000
B Armstrong University of Sydney	Sun exposure and non-Hodgkin Lymphoma: a pooled analysis	\$67,000
P Butow University of Sydney	Quality of life and psychosocial predictors of outcome in a population based study of ovarian cancer	\$93,597
B Henderson Westmead Millennium Institute	Regulated targeting of BRCA1 to nuclear sites of DNA repair	\$72,500
R Saw University of Sydney	Lymphoedema following axillary and groin sentinel node biopsy	\$53,500
R J Simes University of Sydney	Intermediate & high risk, resected gastro-intestinal stromal tumours expressing kit: RCT of adjuvant imatinib mesylate	\$55,000
S Tangye Centenary Institute of Cancer Medicine and Cell Biology	The development and function of anti-tumour cytotoxic lymphocytes in health and disease	\$69,100
D Gottlieb Westmead Hospital	EBV - specific Cytotoxic T Lymphocytes as Tools for Adoptive Immunotherapy for EBV-positive Hodgkin Lymphoma	\$10,000
Total New Research Project Grants		\$692,145





Continuing Research Program Grants

P Hogg University of New South Wales	Tumour angiogenesis	\$209,000
G Marshall University of New South Wales	Defining the cause and improving the treatment of childhood neuroblastoma	\$315,000
R Sutherland The Garvan Institute of Medical Research	Steroid and growth factor signalling in the pathophysiology of breast and prostate cancer	\$377,000
Total Continuing Research Program Grants		\$901,000

Continuing Research Project Grants

M Stockler University of Sydney	The ZEST trial: A double-blind, placebo-controlled trial of Zolof's Effects on Symptoms and survival Time in advanced cancer.	\$65,425
V Ahern Westmead Hospital	A phase III study of regional radiation therapy in early breast cancer	\$38,362
H Gurney Westmead Hospital	The timing of androgen deprivation in relapsed or non-curable prostate cancer patients	\$10,650
R Reddel Children's Medical Research Institute	Functions of ALT-Associated PML Bodies	\$160,750
C Lean University of Sydney	Improved management of thyroid disease by the correct pathological diagnosis obtained non-invasively by magnetic resonance at 3 tesla	\$190,000
G Halliday University of Sydney	The role of UVA in human skin carcinogenesis	\$99,250
B Meiser University of New South Wales	A randomised trial of a decision aid for genetic testing for hereditary cancer	\$69,950
H Mitchell University of New South Wales	The role of helicobacter pylori infection and host cytokine polymorphisms in the aetiology of gastric cancer	\$107,136
R Lock University of New South Wales	Targeting angiogenesis signalling pathways in childhood acute lymphoblastic leukaemia	\$80,000
A Grulich University of New South Wales	Cancer in dialysis patients and kidney transplant recipients: Incidence, risk factors and survival	\$27,500
P Hersey Newcastle Mater Misericordiae Hospital	Sensitisation of human melanoma to killing by the immune system	\$139,620
R Ward University of New South Wales	The significance of CpG island methylation in the pathogenesis of hyperplastic polyps and colorectal cancer	\$135,000
A deFazio Westmead Millennium Institute	Molecular epidemiology of ovarian cancer study - WA, Tasmania and a national clinical follow-up core	\$69,500
J Kirk Westmead Hospital	kConFaB: A consortium for research on familial breast cancer	\$59,000
Total Continuing Research Project Grants		\$1,252,143

Career Development Research Fellowship

G O'Neill Children's Hospital Westmead	\$150,000
Total Research Fellowships	\$150,000

Other Research Programs

Cancer Trials NSW (CTN)	\$1,317,000
Cancer Epidemiology Research Unit (CERU)	\$1,321,034
Cancer for Health Research & Psycho-Oncology (CheRP) \$620,000	
Hereditary Bowel Cancer Registers	\$208,694
Quality Improvement in Cancer Care Research and Demonstration	\$300,000
45 and Up Cohort Study	\$400,000
Commissioned Research Projects	\$243,000
Total Other Research Programs	\$4,409,728
TOTAL RESEARCH FUNDED	\$7,405,016



THE CANCER COUNCIL SOUTH AUSTRALIA

New Research Project Grants

Dr Ross Butler, Dr Gordon Howarth Gastroenterology, Women's and Children's Hospital	Prevention of chemotherapy-induced mucositis and effects on tumour burden by folate-producing probiotics	\$48,833
Professor David Bowtell, Dr Anna DeFazio, Dr Penny Blomfield, Dr Nikolajs Zeps, Dr Dorota Gertig, Professor Michael Friedlander A/Professor Paul Harnett, Dr David Wyld, Dr Margaret Davy Department of Research	Molecular Epidemiology of Ovarian Cancer: The Australian Ovarian Cancer Study - Clinical Follow-Up Core	\$36,700





Peter MacCallum Cancer Centre		
Dr Michael Brown, A/Professor Ross McKinnon Medical Oncology Royal Adelaide Hospital	Invivo investigation of the effects of tumour associated macrophages upon capecitabine metabolism and the subsequent effects of the 5-FU generation upon the macrophages themselves.	\$60,380
Dr Boon Chua, Professor David Joseph, Dr Jennifer Harvey, Dr Verity Ahern, Department of Radiation Oncology Peter MacCallum Cancer Institute	A phase III study of regional radiation therapy in early breast cancer	\$23,179
Professor Gillian Duchesne, Professor Nigel Spry Mr Alan Stapleton, Dr Howard Gurney, Ms Elaine Beller Division of Radiation Oncology Peter MacCallum Cancer Institute	The timing of androgen deprivation in relapsed or non-curable prostate cancer patients	\$10,650
Dr Andreas Evdokiou, Dr Lisa Butler, A/Professor David Findlay Orthopaedics and Trauma University of Adelaide	Inhibition of breast cancer growth in, and metastasis to, bone using TRAIL therapy	\$68,250
A/Professor Jennifer Gamble, Dr Christopher Hahn Professor Mathew Vadas Vascular Biology Laboratory Division of Human Immunology IMVS	Characterisation of a novel angiogenesis gene endomorphin	\$60,902
Dr Yeessim Khew-Goodall IMVS	A potential novel regulator of epithelial-mesenchymal transitions: elucidating its mechanism of action	
A/Professor Grantley Gill, Dr James Kollias Dr Melissa Bochner Department of Surgery University of Adelaide	Sentinel lymph node biopsy versus axillary clearance in operable breast cancer	
Dr Mark Guthridge Human Immunology, Hanson Institute	The role of a novel GM-CSF signalling pathway in regulating cell survival in myeloid leukaemia	\$78,205
A/Professor Timothy Hughes Division of Haematology, IMVS	Causes and significance of persistent leukaemia in CML patients treated with ABL kinase inhibitors	\$68,527
A/Professor David Horsfall, Professor Wayne Tilley Dame Roma Mitchell Cancer Research Laboratories Hanson Institute	Versican : a cell motility-promoting proteoglycan pivotal for prostate cancer metastasis	\$73,967
Professor Sharad Kumar Department of Haematology Hanson Institute, IMVS	Mechanism of caspase-2 activation and its regulation during apoptosis	\$69,500
A/Professor Geoffrey Lindeman, Dr David Amor A/Professor Judy Kirk, Dr Graeme Suthers, Professor Jack Goldblatt, Dr Mike Gattas RMH Familial Cancer Centre Royal Melbourne Hospital	kConFab – A Consortium for Research on Familial Breast Cancer	\$58,500
Professor Alexander Morley, Dr Scott Grist Department of Haematology and Genetic Pathology Flinders Medical Centre	Mitochondrial mutations in clonal haematological disorders	\$72,819
Professor Howard Morris, A/Professor Brian May, Professor Wayne Tilley IMVS	Prostate cancer cell synthesis of 1,25 dihydroxyvitamin D and cell growth	\$84,016
Professor Ian N Olver, Professor Robert J Barrett Department of Medicine Royal Adelaide Hospital University of Adelaide	End-of-life decision-making: Informing policy using 'maximum variety' sampling and patient derived-qualitative data	\$68,342
Professor R John Simes, Professor John R Zalberg, A/Professor Paul Waring, A/Professor, G Bruce Mann, A/Professor B Mark Smithers, Dr Dusan Kotasek, Dr Guy Van Hazel NHMRC Clinical Trial Centre University of Sydney	Intermediate & high risk, resected gastro-intestinal stromal tumours expressing kit:RCT of adjuvant imatinib mesylate	\$10,834
Dr Sally-Anne Stephenson, Dr Peter Bardy Department of Haematology/Oncology The Queen Elizabeth Hospital	Targeting EPHB4 as an anticancer therapy	\$77,434
A/Professor Murray Whitelaw School of Molecular and Biomedical Science University of Adelaide	Investigating the role of Sim2 in pancreatic cancer	\$62,000
Dr Andrew Zannettino, Dr Stan Gronthos Division of Haematology IMVS	Does Stromal Derived Factor 1 (SDF - 1) Play a Role in Osteolytic Bone Disease and Increased Bone Marrow Microvessel Density in Multiple Myeloma?	\$73,578
Total Research grants		\$1,198,413



Other programs funded in 2005

Senior Fellowships	
C Ricciardelli, University of Adelaide	\$84,345
S Stephenson, The Queen Elizabeth Hospital	\$84,345
Total Senior Fellowships	\$168,690
Fellowships	
A Evdokiou, Hanson Centre	\$73,955
G Buchanan, University of Adelaide	\$73,955
R Gibson, Royal Adelaide Hospital	\$73,955



Total Fellowships	
W Bruce Hall Cancer Research Fellowship	
Pending new appointment	\$79,000
Peter Nelson Leukaemia Research Fellowship	
Pending new appointment	\$84,345
Other Research Programs for 2005	
Chair in Cancer Care – Professor Ian Olver	\$100,000
Travel Grants	\$35,000
Distinguished Visitors	\$15,000
Student Vacation Scholarships	\$13,600
The Freemasons Cancer Research Scholarship (1)	\$25,000
Data Managers Program	\$152,000
Microarray Bioinformatics	\$46,589
Total of Other Research Programs	\$387,189
TOTAL RESEARCH FUNDED	\$2,139,502

THE CANCER COUNCIL TASMANIA

Research grants

Dr Jo Dickinson	Study of molecular events in large Tasmanian prostate cancer families	\$20,000
Dr Christina Trambas	Microscopic, biochemical and functional characterization of Natural Killer cell invasion into tumour target cells (emperipolesis)	\$40,000
Dr Penny Blomfield Royal Hobart Hospital	Molecular epidemiology of ovarian cancer: Australian ovarian cancer study – Western Australia, Tasmania, and a national clinical followup	\$30,850
Dr Greg Woods	Long term effects of UVB irradiation on neonatal Langerhans cells	\$35,000
Dr David Amor Royal Hobart Hospital	KconFab: The Kathleen Cunningham Consortium for Research into familial aspects of breast cancer	\$10,300
Total research grants		\$136,150

Funded by David Collins Leukaemia Foundation (DCLF) (amount not included in total research funding)

Dr Adele Holloway University of Tasmania	Identifying genes regulated by AML in myeloid cells	\$28,000
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Jeanne Foster Scholarships

Janet Colbeck – Myer, Hobart	To attend a breast prosthesis fitting course in Melbourne during July 2004	\$174
Tahnee Oliver – Clinical Nurse, North West Regional Hospital	To study a Master of Nursing by Coursework, Nurse Practitioner Pathway at the University of Melbourne	\$1,000
Michelle Clark – Capri Body Fashions, Launceston	To attend a breast prosthesis fitting course in Melbourne during July 2004	\$224
Jenny Carter, Breast Care Nurse, St Vincents Hospital, Launceston	To attend the 7th National Breast Care Nurses Conference in Melbourne during February 2005	\$400
Susan Schwabe, Breast Care Nurse, Kings Meadows Health Centre	To attend the 7th National Breast Care Nurses Conference in Melbourne during February 2005	\$400
Nola Polmear, Breast Care Nurse, Hobart Community Health	To attend the 7th National Breast Care Nurses Conference in Melbourne during February 2005	\$400
Anne-Marie Avery, Radiation Therapist, Holman Clinic, Launceston General Hospital	To attend the 14th Annual Meeting of the Australasian Brachytherapy Meeting to be held in Alice Springs during March 2005	\$600
Angela Neville, Radiation Therapist, Holman Clinic, Launceston General Hospital	To attend the annual conference of the professional body for Radiation Therapists to be held in Auckland, New Zealand during August 2005	\$700
Total Jeanne Foster Scholarships		\$3,898

Other research grants

Julie Robinson, Social Worker Launceston General Hospital	Athena Foniadakis Leukaemia Scholarship for professional development in cancer control	\$5,000
Amir Tulumovic, Nurse, Royal Hobart Hospital	Athena Foniadakis Leukaemia Award	\$900
Melinda Minstrell, The Cancer Council Tasmania	Athena Foniadakis Research Grant	\$10,000
Launceston General Hospital & Royal Hobart Hospital	Clinical Trial Data Managers	\$39,000
To be announced	Tasmanian Acord Workshop for new researcher	\$2,500
Dr Penny Blomfield Royal Hobart Hospital	Gynaecological cancer outcome data collection	\$5,000
Owen Sprod	The Cancer Council Tasmania Tattersalls Award. Regulation of gene expression in cancer cells	\$10,000

Total other research grants	\$72,400
TOTAL RESEARCH FUNDED	\$212,448

THE CANCER COUNCIL VICTORIA

Research grants

R Anderson Peter MacCallum Cancer Centre	Caveolin-1 regulation of breast cancer growth and metastasis	\$65,000
D Bowtell, A de Fazio, P Blomfield, N Zeps, D Gertig, M Friedlander, P Harnett, D Wyld, M Davy Peter MacCallum Cancer Centre	Molecular epidemiology of ovarian cancer: Australian ovarian cancer study – Western Australia, Tasmania and a national clinical follow-up core	\$69,993
I Campbell Peter MacCallum Cancer Centre	Molecular and functional analysis of the chromosome 7q31 tumour suppressor gene ST7	\$70,000
I Campbell, K Mitchelhill, A Dobrovic, G Rice, M Quinn, N Ahmed Peter MacCallum Cancer Centre	Biomolecular fingerprints as early diagnostic indicators of ovarian cancer	\$70,000
H Cheng, Zhu, T Mulhern University of Melbourne	Regulation of activity and subcellular localisation of the tumour suppressor PTEN	\$70,000
P Choong, J Ojaimi St Vincent's Hospital	The resistance of growth plate cartilage to invasion by tumour: PEDF, a potent anti-angiogenic factor regulates osteosarcoma behaviour	\$70,000
B Chua, D Joseph, J Harvey, V Ahern Peter MacCallum Cancer Centre	A phase III study of regional radiation therapy in early breast cancer	\$70,000
P Darcy, M Kershaw, J Trapani Peter MacCallum Cancer Centre	Preclinical development of gene-engineered T cells for immunotherapy of cancer	\$70,000
G Duchesne, N Spry, A Stapleton, H Gurney, E Beller Peter MacCallum Cancer Centre	The timing of androgen deprivation in relapsed or non-curable prostate cancer patients	\$10,650
M Ernst, P Waring Ludwig Institute for Cancer Research	The tumorigenic effect of overexpression of DNA methyltransferases on the intestinal epithelium	\$60,000
J Heierhorst St Vincent's Institute of Medical Research	A novel human DNA damage response protein that interacts with the CHK2 and PML tumour suppressors	\$60,000
J Hopper, E Smibert, A Mitchell, K Waters University of Melbourne	Victorian Paediatric Cancer Family Study	\$70,000
P Humbert, S Russell, H Richardson Peter MacCallum Cancer Centre	The role of mammalian scribble in proliferation and tumourigenesis	\$70,000
D Jans Monash University	The tumour cell-specific nuclear targeting signal of chicken anaemia virus VP-3: potential for anti-tumour therapy	\$65,000
R Johnstone Peter MacCallum Cancer Centre	Mechanism of action of histone deacetylase inhibitors: novel anti-cancer drugs	\$60,000
J Levesque, L Purton Peter MacCallum Cancer Centre	Use of retinoids and inhibitors of endothelial cell adhesion molecules to enhance mobilisation of haemopoietic stem cells by G-CSF	\$69,750
G McArthur Peter MacCallum Cancer Centre	Targeting CDK2 in breast cancer associated with mutations in BRCA1	\$70,000
M McCormack, S Jane, D Curtis Royal Melbourne Hospital	Analysis of the interaction of the T-cell oncoproteins Sc1 and Lmo2 as a therapeutic target for T-cell acute lymphoblastic leukaemia	
M Michael, B Burmeister A Wirth Peter MacCallum Cancer Centre	Randomised phase II study of two regimens of palliative chemoradiatic therapy in the management of locally advanced non small cell lung ca	
C Mitchell Monash University	Role of the PIPP lipid phosphatase in cell differentiation and polarity	
S Nutt, L Wu Walter & Eliza Hall Institute of Medical Research	The role of the proto-oncogene PU.1 in haemopoiesis	\$60,000
H Puthalakath Walter & Eliza Hall Institute of Medical Research	Post-translational regulation of the pro apoptotic protein BIM	\$55,000
A Scott, V Rayzman Ludwig Institute for Cancer Research	Development and evaluation of a transgenic mouse model for anti-human A33 targeted therapy	\$70,000
M Sim, G Benke Monash University	Pesticide exposure and cancer in fruit growers and orchardists	\$40,000
J Simes, J Zalberg, P Waring, B Mann, M Smithers, D Kotasek, G Van Hazel Peter MacCallum Cancer Centre	Intermediate and high risk, resected gastro-intestinal stromal tumours expressing kit: RCT of adjuvant imatinib mesylate	\$13,334
A/Prof M Smyth Peter MacCallum Cancer Centre	TRAIL-mediated immunosurveillance, immunoselection and immunotherapy of cancer	\$70,000
T Tiganis Monash University	Protein phosphatases and mitosis	\$60,000
J Villadangos Walter & Eliza Hall Institute of Medical Research	Mechanisms of cross-presentation in dendritic cells	\$60,000
E Vincan Peter MacCallum Cancer Centre	FZD7 signalling in colon cancer	\$60,000
Total research grants		\$1,744,352

Postdoctoral Research Fellowships

E Cretney, Peter MacCallum Cancer Centre	\$58,500
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B Croker, Walter and Eliza Hall Institute of Medical Research	\$1,125
B Hogan, Ludwig Institute for Cancer Research	\$58,500
S Wimmer-Kleikamp, Monash University	\$29,250
Total postdoctoral research fellowships	\$147,375

Postgraduate Research Scholarships and Vacation Studentships

J Becanovic, Monash University	\$150
L Dow, Peter MacCallum Cancer Centre	\$21,510
C Fedele, Monash University	\$23,150
H Gan, Ludwig Institute for Cancer Research	\$27,630
K Horan, Monash University	\$21,510
E Lee, Walter & Eliza Hall Institute of Medical Research	\$22,530
M Loughrey, Peter MacCallum Cancer Centre	\$27,630
K Mason, University of Melbourne	\$28,150
E Naik, Walter & Eliza Hall Institute of Medical Research	\$23,150
J Stone, University of Melbourne	\$13,260
M Wall, Peter MacCallum Cancer Centre	\$27,630
L Williams, Peter MacCallum Cancer Centre	\$22,530
J Yu, Walter & Eliza Hall Institute of Medical Research	\$13,242
24 six week Vacation Studentships	\$23,940
Total scholarships and studentships	\$296,012

Fellowships

Carden Fellowship	D Metcalf, Walter and Eliza Hall Institute of Medical Research	\$200,000
Dunlop Fellowship	A Roberts, Walter and Eliza Hall Institute of Medical Research	\$48,114
K & H Fraser Fellowship	P Colman, Walter and Eliza Hall Institute of Medical Research	\$100,000
Lions Fellowship (variable)	B Anderson, Walter and Eliza Hall Institute of Medical Research	\$20,000
Total fellowships		\$368,114

Other Research Programs

Tissue Bank Coordination Project		
Medical and Scientific Activities		
Total other research programs		



Cancer Control Research Institute Programs

Cancer Epidemiology Centre	\$874,000
Victorian Cancer Registry	\$1,662,000
The Melbourne Collaborative Cohort Study (Health 2000)	\$620,000
Centre for Behavioural Research in Cancer	\$1,475,000
Centre for Clinical Research in Cancer	\$1,328,000
VicHealth Centre for Tobacco Control (Cancer Council Victoria contribution to VicHealth Centre)	\$495,000
Total Cancer Control Research Institute programs	\$6,454,000
TOTAL RESEARCH FUNDED	\$9,094,853



THE CANCER COUNCIL WESTERN AUSTRALIA

Research grants

M Degli-Esposti	Improving anti-tumour responses: relevance of DC mediated activation of NK cells (two year grant)	\$110,000
S Devadson	Independent assessment of cigarette output and components in real life situations	\$52,209
A Currie	Cationic antimicrobial peptides as novel natural adjuvants for enhanced systemic and intratumoural cancer therapy	\$55,000
B Musk	Radiographic silicosis and lung cancer in Kalgoorlie Goldminers	\$53,250
J Olynyk	Investigating the effectiveness of anti-inflammatory drugs in preventing the progression of chronic liver disease to hepatocellular carcinoma	\$55,000
M Bogoyevitch	New approaches to target breast cancer: screening for novel inhibitors of the protein kinase aurora-A	\$51,950
J Creaney	Ribonucleotide Reductase: A Predictive Molecular Marker for Malignant Mesothelioma	\$54,930
P Leedman	Regulation of erbB gene expression in cancer	\$55,000
M Beilharz	Regulatory T cells and Mesothelioma	\$40,000
Total research grants		\$527,339

Edward and Patricia Usher Student Vacation Research Scholarships

P Chia	Expression of inhibitors of apoptosis in mesothelioma and tumour cell survival	\$2,000
C Kipsaina	The incidence of third primary breast cancer	\$2,000
S Lai	The effect of bacterial DNA treatment on HMG-1 expression and apoptosis in human breast cancer cells	\$1,200
R Lee	Development of a qualitative database and preliminary analysis for the National Analysis of the Supportive and Palliative Care needs of Parents whose Children have Died from Cancer	\$2,000
A Tyler	Correlation of a bioeffect model with tumour control in localised prostate cancer treated with brachytherapy	\$2,000
Total vacation research scholarships		\$9,200

John Nott travelling fund

P Rajput	Attend University of Pennsylvania to conduct part of PhD study in the laboratory of their paediatric cancer centre.	\$5,000
Total John Nott travelling fund		\$5,000

Professorial Chairs

Chair of Palliative Care Research	Edith Cowan University	\$100,000
Chair of Behavioural Cancer Research	Curtin University of Technology	\$125,000
Chair of Clinical Cancer Research	University of Western Australia	\$250,000
Total professorial chairs		\$475,000

Other research grants

kConFab: A national consortium for research into familial breast cancer	Genetic Services of WA, King Edward Memorial and Princess Margaret Hospitals	\$27,000
Bone tumour registry		\$27,000
Children's Cancer Research Fellowship	TVW Institute Child health Research	\$15,000
Prostate Cancer Screening		\$5,000
Non-melanoma skin cancer incidence study		\$15,000
Formative evaluation of a physical activity and nutrition program for Western Australian primary schools	Edith Cowan University	\$5,000
Travel grants	Attend 38th Annual American Association for Cancer Education Conference Attend Australian Lung Cancer Trials Group Meeting and COSA	\$750 \$855
Total other research grants		\$95,605
TOTAL RESEARCH FUNDED		\$1,112,144

QUEENSLAND CANCER FUND

Research grants
2004-2005

J Simes, T Hugh, V GebSKI, S Riordan, M Fink, J Cebon, J Olynyk, D Crawford, T Price	Adjuvant interferon and/or Celecoxib for hepatoma	\$28,000
G Lindeman, D Amor, J Goldblatt, M Gattas	kConFab: A national consortium for research into familial breast cancer	\$71,700
G Duchesne, N Spry, A Stapleton, H Gurney, E Beller	The timing of androgen deprivation in relapsed or non-curable prostate cancer patients	\$10,900
B Chua, D Joseph, J Harvey, V Ahern	A phase III study of regional radiation therapy in early breast cancer	\$23,750
F Gardiner, J Clements, T Walsh, J Bartley, J Gorman, A Pettitt	Proteomic approaches to the early detection of prostate cancer	\$71,700
J Clements, J Gao, D Nicol	Characterisation of prostatic kallikrein gene expression during crosstalk between osteoblasts and prostate cancer cells: A model for prostate cancer bone metastasis	\$71,700
R Tindle	Novel cancer vaccine delivery using recombinant Hepatitis B surface antigen VLP - and DNA vectors	\$71,700
J Hancock, A Harding	A biochemical analysis of MAP kinase pathway activation at the plasma membrane	\$71,700
R Sturm	Role of Beta3 integrin induced osteonectin expression in melanoma metastasis	\$71,700
K-N Zhao	Using yeast model to study the functional roles of three early genes in the life cycle of bovine papillomavirus type 1	\$71,700
E Ward, L Cahill	Dysphagia (impaired swallowing) following surgical removal of the larynx: Factors contributing to the swallowing disorder, and the efficacy of intensive physiologically based therapy to improve swallowing outcomes for this population	\$44,400
D Krause	The role of the tousel-like kinases in the S-phase checkpoint response	\$71,700
A Boyd	The role of Eph protein over-expression in colon cancer metastasis	\$71,700

D Moss, D Chin, J David, S Elliott, M Sherritt	A phase I trial on adoptive transfer of cytotoxic T cells specific for EBV latent membrane proteins (LMP1 and 2) delivered to patients with nasopharyngeal carcinoma	\$71,700
R Khanna, J Tellam	Molecular characterisation of genetic variants of LMP1 oncogene from EBV-associated malignancies	\$71,700
I Tonks, G Walker	Investigating pocket protein function in development of cancer	\$71,700
M Lavin, N Gueven	Role of ATX/SMG-1 protein in responding to DNA damage and maintaining genome stability	\$71,700
G Hill	The role of donor T cell derived IL-10 in the enhancement of leukaemia-free survival after allogeneic SCT	\$71,700
D Hart	Purified Blood DC Vaccination with defined Tumour Associate Antigens for Multiple Myeloma	\$73,800
D Hart, K Radford, M Kato	Discovery of breast cancer antigens recognised by cytotoxic T lymphocytes for tumour immunotherapy	\$71,700
M Kato	DEC-205 C-type lectin receptor-mediated antigen loading to dendritic cells to elicit antigen-specific cytotoxic T lymphocyte responses	\$71,700
S Ralph, A Mellick	Melanoma and resistance to interferon therapy	\$71,700
J Neuzil	Cancer cell targeting using receptor-specific peptide adducts with vitamin E analogues	\$71,700

2005-2006

L Chopin, A Herington	Ghrelin receptor isoforms in prostate cancer proliferation: roles of heterodimerisation and signalling cross-talk	\$71,700
A Yap	Tiam-1: a key regulator of E-cadherin signalling and epithelial organisation	\$71,700
F Gardiner, M Burger, J Yaxley, H Samarantunga, M Lavin	Multiple molecular markers for prostate cancer diagnosis from enriched cells from ejaculate	\$71,700
A Nicol, J Lickliter	Immune Therapy for melanoma with dendritic cells co-pulsed with a-galactosylceramide and peptides	\$71,700
B Gabrielli	G2 phase cdk4 activity regulates expression of proteins essential for the fidelity of mitosis: a target for UV-induced p16 expression	\$71,700
X S Liu, I Frazer	Optimising immunotherapy in tumour antigen experienced host	\$71,700
G Leggatt, I Frazer	The role of NKT and CD8 cells in tumour immunotherapy using epithelial tumour models	\$71,700
K Spring, B Leggett, J Young	Role of oncogenic BRAF (V599E) mutation in the molecular pathogenesis of sporadic colorectal cancer	\$71,700
N Hayward	Identification of novel tumour suppressor genes in melanoma using array-CGH	\$71,700
K Loffler, N Hayward	Molecular mechanisms of insulinoma development	\$71,700
J Young, J Jass	Characterisation of a novel syndrome of familial colorectal cancer based on the serrated pathway of tumour development	\$71,700
K K Khanna, M Cummings, C Furnival	Characterisation of a novel protein involved in breast cancer progression	\$71,700
G Hill	Host B cells and Graft-versus-host disease	\$71,700
N Kienzle, A Kelso	In Vivo functions of CD8 low T cells	\$71,700
M Gandhi, R Khanna, P Marlton, G Kennedy	EBV-specific Cytotoxic T Lymphocytes as tool for EBV-positive Hodgkin Lymphoma	\$71,700
M Michael, B Burmeister	Randomised Phase II study of two regimens of therapy in management of locally advanced Non-small cell lung cancer	\$71,700
P Butow, P Webb	Quality of life and psychosocial predictors of outcome in a population based study of ovarian cancer	\$68,936
M O'Rouke, M Smithers, K Ellem	Phase III trial of an immunotherapy for Stage III (AJCC) melanoma based on cultured autologous dendritic cells presenting autologous tumour cell analysis	\$71,700
M McGuckin, A Lopez	CA125 (MUC16) in the immunology of ovarian cancer	\$71,700
K Radford, R Wilkinson, P Swindle	Selection of prostate-derived kallikreins for dendritic cell immunotherapy	\$71,700

2005-2007

D Bowtell, D Wyld	Molecular epidemiology of ovarian cancer: The Australian Ovarian Cancer Study - Clinical follow-up core.	\$69,993
J Simes, M Smithers	Intermediate and high risk, resected gastro-intestinal stromal tumours expressing kit: RCT of adjuvant imatinib mesylate	\$10,834
W Warren	The role of the "deflated" gene in the control of cell proliferation	\$71,700
Total research grants		\$3,001,538

Fellowships

Senior research fellow program

M McGuckin, Mater Medical Research Institute and P Webb, Queensland Institute of Medical Research, G Kay, Queensland Institute of Medical Research		\$314,562
Clinical research fellow Richard Laherty, University of Queensland		\$37,200
Total fellowships		\$351,762



Epidemiology and behavioural research programs

Cancer Epidemiology Unit	\$824,700
Behavioural Research Unit	\$662,200
Queensland Cancer Risk Study	\$100,900
Prostate Cancer Supportive Care & Patient Outcomes Trial	\$435,970
Total Epidemiology and behavioural research programs	\$2,023,770

Other research grants

QCF/Griffith University: Cancer Support Centre (psychosocial oncology)	\$98,350
Queensland Family Bowel Cancer Registry	\$50,000
Australian Paediatric Cancer Registry	\$68,000
Colorectal Cancer & Quality of Life Study	\$111,510
Skin Clinics Project	\$192,400
Total other research grants	\$520,260

PhD program 2005

2005 – 2007

John Earnshaw Scholar 2005

Michael Hsueh-Li Lai, Queensland Institute Medical Research
K Wynn, Queensland Institute Medical Research
C Morais, University of Queensland

2004 – 2006

John Earnshaw Scholar 2004

M Jones, Queensland Institute of Medical Research
A Ramsay, Queensland University of Technology
S Mattarollo, University of Queensland

2003 – 2005

John Earnshaw Scholar 2003

L Packer, Queensland Institute Medical Research
K Jawerth, Queensland Institute of Medical Research
E Hacker, Queensland Institute of Medical Research
R Parlett, Mater Medical Research Institute

Total PhD program 2005	\$212,500
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Hospital Based – Data Managers

Royal Children's Hospital	
Mater Hospital – Oncology Centre	
Royal Brisbane Hospital – Radiation Oncology	
Medical Oncology	
Princess Alexandra Hospital	
Darling Downs Medical Oncology Unit	
Mater Adult Hospital	
Mater Children's Hospital	
Royal Women's Hospital	
Data Managers Total	\$401,040
TOTAL RESEARCH FUNDING	\$6,510,870

NATIONAL BREAST CANCER FOUNDATION

Research Grants

NEW SOUTH WALES

NBCF Scholarship E Choy, Royal Prince Alfred Hospital	A randomised controlled trial to evaluate the impact on patient outcomes of involving breast cancer patients in the multidisciplinary discussion of their disease and treatment plan	\$30,000
David Jones Scholarship H Davey, University Of Sydney	Communicating information to women about diagnostic tests for breast disease	\$30,000
NBCF Scholarship K Skelding, University Of Newcastle	Viral Oncolysis of Human Breast Cancer	\$30,000
Kathleen Cuninghame Research Grant P Butow, University Of Sydney	Improving informed consent: A randomised controlled trial of a decision aid for women invited to participate in IBIS-2	\$102,050
Kathleen Cuninghame Research Grant S Clark, Garvan Institute	Epigenetic activation of c-fms oncogene in breast cancer	\$73,250
Kathleen Cuninghame Research Grant	Optimising participation by women with disabilities in mammography	\$92,474

Australian Behavioural Research in Cancer

This is a regular feature in Cancer Forum describing behavioural applications in cancer prevention.

New Results

n Viertel Centre for Research in Cancer Control (VCRCC), Qld

Attitudes and intentions in relation to skin screening

This study evaluated intention to undergo a skin examination and factors associated with intentions as part of a randomised community-based trial of population screening for melanoma involving 18 Queensland communities. Data originated from a baseline cross-sectional telephone survey of 3,110 study participants aged ≥ 30 years. Forty-five per cent of participants intended to have a clinical skin examination in the next 12 months and 72 per cent intended to examine their own skin. Women were more likely to say they intended to have or undertake skin examination. In the multivariate model, intention to undergo skin examination was strongly related to a history of previous clinical skin examination. Other factors associated with intention to screen included a history of skin cancer and a high susceptibility towards skin cancer. Intention to participate in skin screening, both clinical and self-examination was high amongst populations in rural and regional Queensland.

Childhood Cancer Health Survey

This small pilot study was conducted to determine childhood cancer survivors' current health behaviours and their level of interest in health promotion programs. The survey involved 28 Queenslanders who had completed treatment for lymphoma, leukaemia or brain/central nervous system tumours ages 14-30. Ten parents of those under age 18 were also interviewed to ascertain their interest in health programs for their children. Participants were recruited from past and present member mailing lists of two support groups for children and teens living with cancer.

Only 32 per cent of survivors ate the recommended two or more serves of fruit per day and none ate the recommended five serves of vegetables per day. Forty-six per cent were overweight or obese. Thirty-six per cent met the Active Australia guideline for physical activity (150 minutes of activity per week over 5 or more days). Physical activity and Body Mass Index results were significantly related to tumour type, with brain tumour patients faring the worst and lymphoma patients faring the best.

Childhood cancer respondents were extremely or very interested in the following interventions: healthy eating (61 per cent), physical activity (57 per cent), improving one's social life (46 per cent), feeling better about oneself (43 per cent), improving school/work performance (43 per cent) and weight control (36 per cent). The most favoured intervention delivery modality was mailed information with 54 per cent of respondents very or extremely interested in receiving information in this way. This information will be used to inform future research and programming for childhood cancer survivors.

Associations of physical activity with quality of life: findings from the Colorectal Cancer and Quality of Life pilot study

The pilot study for the Colorectal Cancer and Quality of Life study was conducted in March – May 2003. One of the aims of this study was to describe physical activity in individuals recently diagnosed with colorectal cancer (approximately six

months following diagnosis), and to examine associations between demographic and medical variables, physical activity and quality of life. Eighty-nine participants completed telephone interviews. Forty-three per cent of men and 50 per cent of women met current public health guidelines of at least 150 minutes of moderate-intensity activity per week. Physical activity was positively associated with two quality of life domains (physical well-being and emotional well-being). The relationship between physical activity and quality of life varied by gender, marital status and treatment type. These results, although cross-sectional, support the importance of physical activity in improving quality of life among colorectal cancer survivors, as has been shown in randomised clinical trials of exercise interventions amongst other cancer groups. The Colorectal Cancer and Quality of Life study will more closely examine the relationship between physical activity and quality of life, with a large, population-based sample and prospective methodology.

n Centre for Health Research and Psycho-oncology (CHeRP), NSW

The management of nicotine dependent inpatients

Between 20 per cent and 30 per cent of hospital patients in NSW are smokers. The smoke-free hospital environment represents both a challenge for smokers in terms of dealing with nicotine withdrawal and an opportunity for obtaining cessation support. In July 2002 NSW Health distributed the Guide for the Management of Nicotine Dependent Inpatients to all NSW public hospitals. The Guide recommends a series of steps to provide support and assistance to inpatients with nicotine dependence. These recommendations include:

- n Identifying tobacco users
- n Managing inpatient nicotine dependence
- n Prescribing nicotine therapy
- n Monitoring withdrawal symptoms
- n Extending care to discharge

A self-complete survey mailed to senior managers at 206 NSW public hospitals assessed the degree to which the recommendations in the Guide were being met at their hospital. The participants provided data on the proportion of appropriate inpatients receiving care according to the recommendations in the Guide. Of the 206 hospital managers, 83 per cent responded.

It was found that while many inpatient smokers were being identified routinely, the majority of hospitals provided minimal smoking care for inpatient smokers. Levels of NRT prescription and discharge care were particularly low. Some predictors of greater levels of care provision were identified. A quasi-experimental study of organisational change practices to increase the provision of smoking care is being conducted.

n Centre for Behavioural Research in Cancer (CBRC), Vic

Financial stress, smoking cessation and relapse: results from a prospective study of an Australian national sample

This study, led by Mohammad Siahpush, used prospective data from a representative Australian sample to examine the association of financial stress with subsequent smoking cessation among smokers and relapse among ex-smokers. Data were drawn from the first two waves of the Household Income and Labour Dynamics in Australia (HILDA) Survey. Included



were eight items measuring financial stress, such as "[In the past six months] did any of the following happen to you because of a shortage of money? ...Could not pay electricity, gas or telephone bills on time, ... Pawned or sold something, ... Went without meals, ... Was unable to heat home". We used multivariate logistic regression and adjusted for socio-demographic variables. Of the 2076 smokers in Wave 1 of the survey, 10.7 per cent had quit by Wave 2. A one-unit increase in financial stress was associated with a decrease of 13 per cent in the odds of cessation. Of the 2717 ex-smokers in Wave 1, 10.1 per cent had started smoking by Wave 2. A one-unit increase in financial stress resulted in an increase of 19 per cent in the odds of relapse. This study suggests that smokers with financial stress are less likely to quit and that ex-smokers with more financial stress are more likely to relapse. An increase in tobacco excise is recognised as one of the most effective policies for reducing smoking prevalence. Furthermore, there is evidence that these policies are more effective for lower socio-economic groups. However, given that smokers with financial stress are less prone to quit, such policies may in fact worsen the material wellbeing of disadvantaged smokers who already face financial difficulties and fail to quit smoking. Special programmes may have to be implemented to counter the potentially adverse effects of tobacco price increases for these smokers.

A study of compliance of inner Melbourne solarium centres with a new Australian Standard: assessment of age and skin type on usual practice.

This study, led by Suzanne Dobbins, assessed observed compliance with the Australian and New Zealand Standard on Solaria for Cosmetic Purposes which requires solarium operators to provide risk information about skin cancer, provide goggles for eye protection and ensure adequate cleaning of facilities. The voluntary code also requires staff to prevent access to solariums by high-risk groups, including those with very fair skin that burns but does not tan (skin type 1) and those aged under 15 years. People aged 16 or 17 years are permitted to use solariums, provided they have parental consent.

We tested a randomly selected sample of 30 solarium centres in inner and bayside suburbs of Melbourne. Each solarium centre had an approach from three different research assistants with different skin type and age characteristics who posed as potential customers. Potential customers with olive skin who were eligible to use the tanning units tested compliance with provision of risk information, protective goggles and cleaning requirements. Fair-skinned skin type 1 adults tested the extent to which staff assessed customers' skin-type and barred access to skin type 1 customers. Finally, we used 16-year-olds to assess under-age access to the tanning units without parental consent.

When tested by eligible adults, 70 per cent of centres gave some form of information about possible skin cancer risk, 87 per cent provided protective goggles and 80 per cent provided a sign or gave advice to use the goggles. Cleaning of tanning units was undertaken by staff in 33 per cent of centres, and in 43 per cent of cases customers were instructed to clean the tanning unit after use. A further 13 per cent of Centres provided cleaning products without an instruction. Overall, 90 per cent of very fair skinned customers could gain access to the tested solariums. In addition, 52 per cent of 16-year-olds could gain access to the solariums without having to produce parental consent, even though they prompted solarium operators with their age. These findings suggest poor compliance with aspects of the voluntary code pertaining to high-risk groups and indicate a need for revision of the

code, banning of unsupervised tanning visits and increased enforcement efforts.

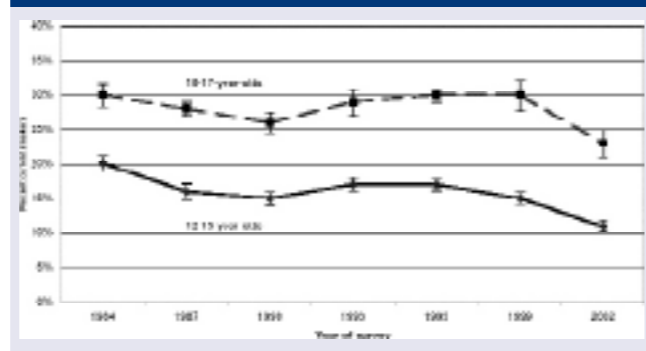
Australian Secondary Students Alcohol and Drug Survey (ASSAD)

In 2002, the seventh in a series of secondary school-based surveys monitoring the use of tobacco, alcohol and other substances among adolescents was conducted throughout Australia. The survey series commenced in 1984 and has been conducted every three years. The current study is conducted as a collaboration between State and Territory cancer organisations, the Commonwealth Department of Health and Ageing, State and Territory Health Departments, and, in Queensland, the Education Department. In 2002, data were collected from 23,417 male and female students aged 12-17 years from 363 schools.

In 2002, the proportion of students who were current smokers (smoked in the seven days preceding the survey) increased from 6 per cent among 12-year-olds to 25 per cent among 17-year-olds. The proportion of students smoking in the previous week almost doubled between the ages of 13 (7 per cent) and 14 (13 per cent). Based on the survey data, we estimate that 205,259 students were currently involved with tobacco smoking in that they had smoked at least one cigarette in the week prior to the study.

One of the strengths of this study is that the questions assessing smoking behaviours and the procedures for sampling students have been the same since the survey series began. This means we are able to examine trends in smoking prevalence over time. Using standard questions and sampling measures, we found that the prevalence of current smoking for 12-15 year olds and 16-17 year olds in 2002 was the lowest since the survey series began in 1984 (Figure 1).

Figure 1: Trends in proportion of current (smoked in past week) smoking among secondary students in Australia (1984-2002)



n Centre for Cancer Control Research (CCCR) and the Tobacco Control Research Evaluation Program (TCRE), SA

Psychosocial research and terminal care

Much of the Centre for Cancer Control Research's (CCCR) earlier work focused on population-based descriptive cancer epidemiology, clinical epidemiology and behavioural risk factor surveillance. More recently, increased attention has been directed at psychosocial research, especially in relation to terminal care.

This has included a collaborative study with researchers from the Department of Social Work and Medical Oncology Unit of the Canberra Hospital, in which survival duration was assessed among patients with terminal cancer according to levels of emotional support. The results indicated that the number of

confidants with whom feelings were being shared at study entry was predictive of survival duration. The relationship was not linear, however, and seemed to be more complex than previously reported among people with cardiovascular disease. Longer survivors were more likely to be sharing their feelings with friends than shorter survivors. By comparison, shorter survivors were more likely to be sharing their feelings with family members than longer survivors. The report is awaiting release in the Journal Supportive Care in Cancer.

The Centre also has provided data-analysis support to the Palliative Care Council of South Australia in investigating population-based survey data on preferred place of death. Factors predictive of a preference for death at home as opposed to an institutional setting have been investigated. Also, the preference for death in a hospice or nursing home, as opposed to a hospital setting, has been analysed. This work is still in progress.

Evaluation of the Smoke-free Pregnancy Project (ongoing)

As reported previously, Quit SA is working in collaboration with the Women's and Children's Hospital and the Lyell McEwin Health Service on a project to reduce smoking prevalence amongst pregnant women attending these hospitals. TCRC is evaluating this project. Antenatal staffs at both hospitals were trained to record smoking status of pregnant women routinely and, where appropriate, to deliver a brief smoking cessation intervention, which may include referral to the Quitline.

Participating staff completed questionnaires before and after the training to assess: attitudes toward smoking and pregnancy; staff's perceptions of their own role in preventing it; current practice in the hospitals; perceived barriers to system change; and also to evaluate the quality and usefulness of the training sessions. Results showed that, although before the training most staff felt that addressing smoking was a part of their role as a health professional most did not routinely ask about smoking and deliver any advice or intervention around cessation. Although many staff did perceive barriers to system change in the area, most felt strongly about smoking and pregnancy and viewed it as an important issue. The training was shown to be generally well-received by the staff and increased their skills and knowledge required to administer the intervention. Staff will be followed-up by telephone to continue to monitor changes in attitudes, knowledge and delivery of the intervention, as well as confidence in delivering the intervention. This project is continuing into 2005, and other evaluation findings will continue to become available throughout 2005/06.

n Centre for Behavioural Research in Cancer Control (CBRCC), WA

Investigating the effect of smoking portrayals in youth orientated magazines

Following on from the work of CBRCC to audit depictions of smoking in a wide variety of youth orientated media, Ms Narelle Weller was awarded a Healthway Starter grant to investigate the effects such portrayals have on the impressions of young people. A mock magazine 10 pages length was created with youth orientated content, particularly in the realm of music and fashion. Photographs within the magazine were taken from other existing youth magazines and included multiple images of models and celebrities smoking a cigarette. In a second version of the magazine these images were digitally altered to remove the offending cigarettes from each photograph but otherwise the images and all other content

remained the same. A total of 360 intercept interviews were then conducted with equal numbers of smokers and non-smokers from each sex between the ages of 14 and 17 years. Equal numbers of participants viewed either one of the two versions of the magazine and were then asked to rate to what extent they thought the magazine was cool, sexy, tough, fashionable, glamorous, fun, attractive, rebellious, etc. Preliminary results suggest an interaction with smokers having favourable attitudes towards the smoking depiction magazine and non-smokers having unfavourable attitudes.

n Cancer Prevention Research Centre (CPRC), Qld

Young women and smoking: an investigation of factors influencing young Queensland women to initiate, maintain and stop smoking tobacco (YWAS)

A research project coordinated by the Young Women and Smoking consortium investigated factors influencing young Queensland women to initiate, maintain and stop smoking tobacco. The consortium (including the Cancer Prevention Research Centre and Centre for Social Research in Communication at the University of Queensland, Women's Health Queensland Wide Inc, Queensland Cancer Fund and the National Heart Foundation of Australia (Queensland Division)), listened to the ideas and opinions of many young women – smokers, ex-smokers and non-smokers.

The project, which was commissioned by Health Promotion Queensland as the first stage of a two-part process (part one for research and part two for addressing the findings of the research), provided recommendations for a Queensland-wide public information and cessation campaign.

The focus identified is on preventing progression to the regular, addicted, long-term smoking habits that are consolidated during young adult life transitions (particularly in the 18-24 years age group).

Action is particularly needed to change those environmental and social influences that lead first to 'social smoking' among young women and then to addicted smoking. Particularly strong influences are:

- n environmental tobacco smoke
- n social cues and incentives to smoke
- n point of sale visibility of cigarette packs
- n tobacco promotion activities

All of these influences act together to normalise cigarette smoking and to make it particularly attractive to children and young adults.

Changes to eliminate exposure to tobacco smoke and the availability and promotion of cigarettes will make a difference. Coordinated mass-communication campaigns and setting-specific and social change initiatives (particularly in nightclubs, pubs and other social settings) can do much to change how young women think and act in relation to smoking cigarettes.

Research in the Pipeline

n VCRCC (Qld)

Brain Tumour Supportive Care Needs Study

This study aims to identify the supportive care needs of Queensland brain tumour patients and their carers. This information will be used to inform the development of an instrument to measure the supportive care needs of patients with brain tumours and their carers, as well as to inform the

provision of supportive care services.

Qualitative interviews with 8 patients and 6 carers have been undertaken and focus groups with patients and carers in Brisbane and Townsville are currently underway. The next phase of the research will be a mail survey to all participating Brain Tumour Support Service patients and carers to ascertain their supportive care needs in order to establish the support services likely to be of most benefit to them.

An investigation into the utility of primary care skin cancer clinics in Queensland

In the July 2004 edition of Cancer Forum we outlined a research project to be conducted by the Queensland Cancer Fund and collaborators from the Queensland Institute of Medical Research and the University of Queensland. Briefly to recap, the aims of the project are to document the volume and casemix of skin lesions examined and excised in primary care skin cancer clinics and general practice and to examine the diagnostic performance within both settings. Other aims of the project are to describe and compare characteristics of patients who undergo a skin examination and skin excision, as well as to document the direct and indirect costs of diagnosis, treatment and management of skin excisions within primary care skin cancer clinics and in usual general practice. Twenty-eight skin clinics and 200 general practitioners from Brisbane, Sunshine Coast, Gold Coast and Toowoomba will be involved in the study. The project has received NHMRC funding for 2005 and 2006.

n CheRP (NSW)

Student nurses: personal health risks, attitudes towards patient interventions and training needs

Nurses have been identified as a key group in the provision of preventive health services because of the frequency and duration of their contact with patients in many clinical settings. Together with academic nursing collaborators at the Universities of Newcastle and Western Sydney, CheRP has instigated a study of lifestyle risk factors amongst nursing students which also examines attitudes towards preventive interventions, confidence levels and perceived training needs.

The main focus of the study is on smoking-related issues, however nutritional and solar protection activities were also examined. By surveying students from all three years of the undergraduate nursing program, it is planned to assess whether significant changes occur during their training both in the prevalence of risk factors and in their willingness/confidence to initiate preventive interventions with patients. Key questions investigated the circumstances under which it was believed nurses should discuss smoking with their patients and the importance students attached to the need for further education to address factual information requirements or patient counseling techniques.

As a side-issue, the ethics approval process for this study has again illustrated the inconsistency of decisions made by different ethics committees. At Newcastle, approval was granted for students to be given the option of returning questionnaires either to a box in the lecture theatre or at another location on the University campus. At the University of Western Sydney (UWS) the option of having a box available in the lecture theatre was deemed too coercive. It is likely this decision was a factor in the lower return rates achieved at UWS.

n CBRC (Vic)

Exploring the needs of facilitators and members of cancer support groups across Victoria

Support groups can be a valuable resource for people touched by cancer, improving knowledge and coping skills and enhancing

quality of life. There is no standard cancer support group - they vary in size, patient type, purpose, aims and approach. The Cancer Information and Support Service (CISS) unit within The Cancer Council Victoria coordinates the Cancer Support Groups Program. The program consists of 115 general and cancer-specific groups across Victoria that are either peer lead or professionally-facilitated. The Cancer Council does not run these support groups, but rather, facilitates their formation and provides information and support to group facilitators. Commencing in 2005, CBRC will work closely with CISS to conduct three related studies that aim to explore the needs of facilitators and members of cancer support groups across Victoria. The first study will be an audit of existing support groups and will aim to quantify the number of support groups for cancer patients in Victoria and to characterise them in terms of: facilitation (peer or professional), longevity, membership size, regularity of meetings, purpose of meetings, demographics of membership, cancer history of membership, functioning of group, awareness and use of Cancer Council information and support. The second study will examine the process of starting up a support group and will determine any gaps in service offered by The Cancer Council. The third study will examine the experiences of support group members who differ in their time since diagnosis to determine the expectations and needs relating to support groups among these two types of patients.

n CCCR and TCRC (SA)

Evaluation of new tobacco control legislation in South Australia.

On 6 December 2004 laws were introduced in South Australia prohibiting smoking in enclosed public places and workplaces (with phase-in provisions for hospitality venues). TCRC is evaluating the impact of the legislative changes. The evaluation involves several components including surveys to measure community support for the smoking restrictions, attitudes toward the legislation among managers and owners of licensed premises, licensed venue compliance and, ultimately, any economic impact of the new laws.

Evaluation of Tobacco the Truth is Out There!

Quit SA disseminated an updated version of the teachers' resource, Tobacco the Truth is Out There! in November 2003 to teachers who had requested it. The resource contains information classroom exercises on tobacco and is particularly aimed at middle school. TCRC has conducted follow-up interviews with teachers and is currently analysing the data to determine use of the resource, familiarity with the resource, areas that were particularly useful and areas for improvement. A report will be available in early 2005.

Involvement in 'Smokescreen II' project, in collaboration with NSW

TCRC and Quit SA are participating in the 'Smokescreen II' project being co-ordinated by The Cancer Council NSW. This project examines the impact on young people of an anti-smoking commercial placed before movies that feature characters smoking. Surveys are currently being conducted in the field.

n CBRCC (WA)

Investigating enhanced presentation methods of the UV Index

A qualitative investigation was conducted by Dr Owen Carter last summer of how to improve presentation methods of the UV index. A number of hypotheses were developed from this investigation, which is currently being tested quantitatively via 600 intercept interviews. The depth of peoples' understanding of the UV index is being tested, as well as their appreciation of

and the motivation effectiveness of four alternative methods of presenting the UV index. Interviews are expected to be completed by the end of January 2005 and results to be made available by the end of March.

Audit of tobacco point-of-sale and special events promotions

Geoffrey Jalleh is conducting two studies investigating marketing and promotion by the tobacco industry. One study is an audit of point of sale marketing of tobacco products in retail outlets to determine whether or not these activities breach tobacco control legislations. And the other study is an audit of marketing and promotional activities at events and venues patroned by young people to scan for below-the-line activities.

State Members of Parliament Tobacco Control Survey

To coincide with the upcoming State election in Western Australia, Geoffrey Jalleh is conducting a telephone survey of State Members of Parliament to canvas opinions on key tobacco control issues. It is anticipated that the data from these studies will assist in building a case for strengthening state and federal tobacco control legislations.

n CPRC (Qld)

Physical activity, sun exposure and the sporting involvements of young Queensland adults: identifying new opportunities for social and environmental interventions (PASS)

Physical activity (which in the main takes place outdoors) may be associated with increased sun exposure. Sun exposure increases risk of skin cancer. The Cancer Council of Australia has now identified physical inactivity an important new risk factor for colon and breast cancer. Cancer organisations would not wish to promote a new preventive behaviour (physical activity), while at the same time increasing exposure to another established cancer risk (sun exposure).

Young adults (those aged 18 to 30 years) are an important target group for physical activity promotion initiatives. There is a well-documented decreasing prevalence of physical activity participation over the young adult years and clear patterns of difference in the physical activity habits of young men (who tend to engage in more vigorous forms of activity) and young women (for whom moderate-intensity activities are more salient). Physical activity habits during the young adult years are likely to be important influences on habitual physical activity during overall adult life and, consequently, have significant implications for long-term chronic disease risk, including risk of colon and breast cancer.

Sun exposure increases risk of melanoma and non-melanoma skin cancers. While the precise roles of sun exposures at different life stages is not fully understood, excessive sun exposure during the young adult years and the persistence of habitual sun exposure throughout adulthood is likely to be related to increased skin cancer risk.

The focus of this study is:

- n On identifying relevant attributes of the settings in which sun exposure takes place, for physically active young adults
- n On the interrelationships between physical activity and sport participation and sun exposure in young adults
- n On identifying relevant attributes and norms of the social networks (particularly sporting clubs and less-formal groups), through which sun protection behaviours may be influenced
- n On making recommendations on settings-based

approaches that can most appropriately address sun exposure habits in young adults

News

n VCRCC (Qld)

Appointment of Associate Professor Lin Fritschi

The Queensland Cancer Fund's Viertel Centre for Research in Cancer Control is delighted to announce the appointment of A/Professor Lin Fritschi to the position of Head, Epidemiology Unit. Lin brings to the VCRCC significant experience in the areas of cancer epidemiology and occupational epidemiology. Her specific research interest areas are skin cancer and occupational exposures.

n CheRP (NSW)

CHeRP have been successful in attracting funds for a number of new projects:

A/Professor Afaf Girgis, Dr Chris Paul and Claire Johnson from CHeRP, together with external collaborators Professor David Currow (Flinders University of South Australia), Professor Linda Kristjanson, Edith Cowan University) and Amanda Neil (University of Newcastle) have been successful in obtaining five years funding from the Commonwealth Department of Health and Ageing to undertake a comprehensive program of work to develop specialist palliative care referral guidelines, screening and assessment tools.

In conjunction with Dr John Wiggers and colleagues from Hunter Population Health, Dr Chris Paul, Dr Raoul Walsh and A/Professor Afaf Girgis were recently awarded four years funding by the Australian Research Council to examine the effectiveness of pro-active telemarketing of a smoking cessation telephone counselling service.

Dr Chris Paul, Dr Raoul Walsh and Flora Tzelepis were awarded one year funding from the University of Newcastle to examine the prevalence, effectiveness and non-cessation use of nicotine replacement therapy in a random community sample of smokers.

Dr Jiong Li was recently awarded a one year Early Career Researcher Grant from the University of Newcastle to explore the lifestyles and cancer surveillance practices of newly diagnosed cancer patients.

Several CHeRP staff participated in the recent COSA Annual Scientific Meeting 2004. Congratulations to Allison Boyes who received an award for Best Oral Presentation for her presentation entitled "It's not all doom and gloom: well-being of cancer survivors five years after diagnosis". Other CHeRP presentations addressed the coping styles of long-term cancer survivors (Alison Zucca), psychological needs of patients with advanced colorectal cancer (Sibilah Breen) and referral practices to palliative care in Australia (Claire Johnson). A/Professor Afaf Girgis was invited to Chair the Psychosocial Oncology Symposium, which included stimulating presentations from Ms Raelene Boyle, Professor James Zabora and Dr Jane Turner.

n CBRC (Vic)

CBRC has welcomed Natalie Sambell as Research Assistant Trainee, who will be working with Suzanne Dobbins on skin cancer control projects. Also add our statistician Professor Melanie Wakefield and A/Professor Yoshi Kashima (Department of Psychology, Melbourne University) have been awarded an ARC Linkage grant for a PhD student for 3 years to study effects of anti-smoking and other cancer control advertising on message processing.

In November 2004, CBRC was subject to external scientific

peer review and we obtained a very positive evaluation of our work program. The review concluded that "CBRC has an impressive record of refereed publications, program evaluation reports, books and book chapters, as well as identified impacts on practice and policy" and that "the CBRC is a leading, internationally recognised, research centre in its field".

Visit our website www.cancervic.org.au/cbrc for information about current CBRC research projects, details of our latest publications and access to the CBRC Research Paper Series.

n CCCR and TCRC (SA)

State Cancer Control Plan

South Australia is presently involved in the development of a State Cancer Control Plan. This is being undertaken under the aegis of the Clinical Senate, a body established to advise the Minister of Health and Department of Health on health policy issues. This plan is being prepared with active involvement and administrative support from The Cancer Council South Australia. Members of CCCR and TCRC are participating in specialist subcommittees on research, population health, clinical care and cancer services infrastructure. Attention is being given in this context to psychosocial and other support needs of people with cancer.

CBRCC (WA)

CBRCC was awarded two ARC and two Healthway grants in the 2004 round of competitive funding for research projects to investigate: the effect of junk food advertising on children's food choices and their appreciation of the persuasive intent of such advertising; methods to retrospectively alter people's memories of experiences with alcohol using health promotion advertising; and investigating the effect of smoking and alcohol consumption portrayed in youth orientated magazines.

Professor Rob Donovan will be resigning as Director of CBRCC at the end of February 2005, but will continue work at the Centre on a part-time basis. Ms Narelle Weller has also

departed from CBRCC to work at the Diabetes Association of Western Australia.

n CPRC (Qld)

The Centre had its five-year funding round reviewed by Queensland Health in May 2004. The review had a positive outcome contract arrangements are in the process of being agreed for a further five years starting July 2005.

Visitors

Dr Karin Proper, a post-doctoral research fellow from Amsterdam, joined the Centre in January 2005 for a three-month visit. Her research program will address environmental influences on physical activity, sedentary behaviour and weight gain.

A/Professor Billie Giles-Corti, from the University of Western Australia, will spend a period of time in April 2005 as a visiting fellow with CPRC. She will work with us on collaborative analyses of the PLACE (Physical Activity in Localities and Community Environments) study.

Conferences/Workshops

Centre staff will be presenting new research findings at the following conferences in the first quarter of 2005:

n Australasian Society for Behavioural Health and Medicine (ASBHM), Melbourne. February 10-12 2005.

n Active Living Research Annual Conference, Coronado, California, USA. February 25-26, 2005

Staff comings and goings

Dr Eva Leslie left CPRC in January 2005. She has returned to her home state of Victoria and will continue to work closely with CPRC colleagues on her physical activity research.

Liane McDermott has returned from maternity leave and is continuing her PhD studies on young women and smoking,

Australia Conference following on from COSA. Sheila Rankin, a consultant radiologist from Guy's Hospital, described the use of CT/PET fusion imaging in lung cancer and contributed to two multidisciplinary sessions.

Multidisciplinary case presentations and hypothetical sessions were used to good effect to illustrate integrated cancer care throughout the meeting. A innovative hypothetical coordinated by Fran Boyle from Royal North Shore Hospital was titled Multidisciplinary Care in Lung Care-The Fellowship of the Ring used the story of the Lord of the Rings (LOTR) as a model for management of lung cancer. The audience was treated to slides of various panel members wearing wigs and wielding props from LOTR characters. Noel Tait from Canberra Hospital chaired a Multidisciplinary Rectal Cancer Care Case study. Issues including genetics, fertility, radical surgery, chemotherapy and radiation were covered. Maurice Eisenbruch from the Centre for Culture and Health examined the often overlooked area of Cultural Competence in Cancer Care with a panel using video vignettes. The role and controversy surrounding complementary and alternative therapy in management of cancer was explored in a hypothetical chaired by Stephen Clarke from Concord Hospital. The background of participants in these sessions were wide and included the specialties of radiology, pathology, surgery, radiation therapy, respiratory medicine, gastroenterology, palliative care, medical oncology, radiation therapy, pharmacy, social work, nursing, clinical trials, genetics and psychology.

In addition to the Consumer Forum there was participation of consumers in the main scientific programme. Raelene Boyle discussed her cancer journey in battling breast cancer in the Psychooncology Symposium. Consumer speakers lent their unique perspectives to the Cancer Genetics, Psychosocial Care, Rectal Cancer Case Study, Neurooncology and Complementary Therapy Sessions.

Clinical trials again had a prominence during the meeting. The ANZ Gynaecological Oncology Group, The ANZ Melanoma Group and the newly formed Australian Lung Trials Group all had their annual meetings concurrent with the conference. The Data Managers Group held a breakfast session examining imaging assessments in clinical trials and also a workshop in standard operating procedures. Nik Zeps coordinated a pharmaceutical industry symposium titled "What Can We Achieve Right Now to Enhance Clinical Trial Participation and Running in Australia". Participants included representatives from the Therapeutic Goods Administration, the NSW Department of Health and the gold sponsor pharmaceutical companies. Clinical Trials in the Elderly was also one of the topics in the special symposium on geriatric oncology.

Joint sessions were held in conjunction with the Lung Cancer Consultative Group of the Australian Lung Foundation and also with the Royal Australasian College of Surgeons Surgical Oncology Group.

Communication workshops were conducted by the Pam McLean Centre in Discussing Prognosis in Lung Cancer. Other workshops included a Look Good Feel Good workshop sponsored by Mayne Pharma, a Patient/Consumer Education workshop run by The Cancer Council Victoria and a National Initiatives in Supportive Care for rural Women with Breast Cancer by the National Breast Cancer Centre. A well attended Melanoma Diagnostic Workshop was conducted by the Sydney Melanoma Unit in conjunction with the Royal Australian College of General Practitioners.

Other special sessions during the conference included New Drugs in Oncology from Pharmacy Group, Supportive Therapies covering mucositis, emesis and cytokines, Let's Talk about Sex (sexuality in cancer) and Melanoma. Radiation Oncology Group

conducted a two part multidisciplinary educational programme in radiotherapy.

Over 120 abstracts describing original research were received for presentation at the conference. These were incorporated into poster presentations and a number of Free Communication sessions under each of the COSA Groups. Social Work Group and Psychooncology Group abstracts were grouped together in two sessions because of their common themes. Radiation Oncology and Medical Oncology Group also had a joint session. This year there was again a Quality in Cancer Services Free Communication session chaired by Anne Lloyd although there is not as yet a Quality group of COSA. Neurooncology is now formally a group of COSA and had an inaugural AGM following its Free Communication breakfast session.

All abstracts were assessed and selected for presentation by group chairs and organising committee members. The posters and oral presentations were again scored and ranked for merit and presentation at the meeting by independent judges. The prize winners this year are as follows:

Student/Trainee Award (Eli Lilly)

Dr Ray Ashgari, Liverpool Hospital

Estimation of an optimal chemotherapy utilisation rate in newly diagnosed colon cancer

Best Oral Presentation Prize (Sanofi)

Ms Alison Boyes, University of Newcastle

It's not all doom and gloom: Well being of cancer survivors 5 years after diagnosis.

Best Poster Prize (Novartis)

Ms Tracey Doherty, Flinders Medical Centre

Utilisation of Clinical Practice Improvement Methodology to decrease the incidence of chemotherapy induced nausea and vomiting in a haematology/oncology day unit

Best Overall Abstract Prize (COSA)

Ms Natasha Sekelja, University of Sydney

Early and later referral to palliative care: a randomised controlled trial of patients with metastatic cancer.

Two award lectures were given this year. The first was by Professor Richard Fox from the Royal Melbourne Hospital, the recipient of the Pierre Fabre Achievement Award, and the second by Anna Nowak from the NHMRC Clinical Trials Centre who is the Medical Oncology Group/Novartis Fellowship recipient.

The two social functions were well attended with the Canberra regional wine tasting welcoming reception and the Conference Dinner in the Great Hall of New Parliament House.

I would like to acknowledge the enthusiasm and assistance of my organising committee. The helpful advice from Nik Zeps and David Goldstein the convenors of the two previous ASMs was greatly appreciated. Thanks also to Bernard Stewart chair of the Cancer Research Group for organising two COSA symposia at the Australian Health and Medical Research Congress (AHMRC) in Sydney and also helping to smooth the sharing of Pierre Hainaut and Martin Gore between the meetings, which were running concurrently in the two cities. Special thanks also to Margaret McJannett, Executive Officer of COSA, and Ruth Lilian from Pharmaevents for their tireless logistical support with the meeting. COSA is also most grateful for the support of the industry sponsors some of whom were exhibiting for the first time. The 2005 meeting will be in Brisbane and my best wishes go out to Sandro Porceddu and his organising committee.

Desmond Yip

Convenor

Cancer Care: An integrated approach – Clinical Oncological Society of Australia 31st Annual Scientific Meeting

The 31st COSA Annual Scientific Meeting was held at the National Convention Centre in Canberra from 27-30 November 2004. The theme of the meeting "Cancer Care: An Integrated Approach" was chosen to emphasise the modern multidisciplinary and multimodality approach to coordinated cancer care. COSA is in a unique position of being a national body that represents all health professionals involved in cancer care with an annual meeting that caters for all of these groups.

As with previous conferences, a consumer forum was hosted by The Cancer Council ACT and Cancer Alliance Network on the day preceding the main conference and featured national and international guest speakers on the topics of colorectal cancer, breast cancer, ovarian cancer, prostate cancer, psychosocial issues, palliative care and spirituality. The forum was opened by Lady Marlena Jeffrey and 150 consumers attended.

At the opening session, Martin Tattersall Professor of Cancer Medicine at the University of Sydney spoke on the Development of Integrated Care in Cancer with the evolution of multidisciplinary treatment teams and the recognition of the importance of screening programmes, clinical trials and maintenance of quality of life. Laurie Grealish from University of Canberra presented a paper on Integrated Patient Support in looking at philosophical assumptions of how current health

systems are divided into treatment and support and how a shift away from medically driven health care may work in cancer care. Peter Harper from Guy's Hospital London described the formation of a model of Coordinated Oncology Research in the United Kingdom with a National Cancer Research Network to provide centralised support and management of oncology trials. This presentation was especially timely as the Australian Federal Government had just prior to the elections committed to the formation of a National Cancer Centre as well as to infrastructure funding for cooperative group clinical trials.

A strong international faculty contributed to a number of symposia and sessions. Peter Harper discussed the issues of cancer in the elderly in a breakfast session and symposium and also participated in ovarian and lung cancer sessions. Martin Gore from the Royal Marsden presented on ovarian cancer, gene therapy and biological therapies in melanoma. Pierre Hainaut from the IARC in Lyon discussed the role of p53 in the Genetics of Cancer Symposium. In the Palliative Care symposium Nicholas Christakis from Harvard Medical School talked on the impact of healthcare on surviving family members of cancer patients and Christina Mason from St Joseph's Hospice London on the impact on carers. James Zabora from the Catholic University of America presented on psychosocial screening and programme development as well as participated in the inaugural Oncology Social Work



Cancer Forum Editorial Board – changing of the guard

The Cancer Council Australia would like to thank Associate Professor Robyn Ward for her invaluable contribution as a member of the Cancer Forum Editorial Board over the past decade. Professor Ward stepped down from the Editorial Board at the end of 2004 to devote more time to her patients and research commitments.

Of course, with A/Professor Ward departing, the search was on to find an appropriate person to fill her sizeable shoes.



Dr Stephen Della-Fiorentina

On that note, we welcome Dr Stephen Della-Fiorentina, who has kindly offered his services as a member of the Editorial Board. Dr Della-Fiorentina is a medical oncologist and currently is Director of the Macarthur Cancer Therapy Centre and Interim Area Director of Medical Oncology South West Sydney Health Service. He works at Campbelltown, Liverpool and Bowral. He trained at Westmead and RPA. Dr Della-Fiorentina's clinical interests are lung and breast cancer

and he chairs the Research Committee and clinical trials units at Campbelltown and Liverpool hospitals. Outside of work he is married, a director of Bowral Bowling Club and patron of Bodyline Dance Academy in the Southern Highlands.

Productivity Commission advised of future squeeze on cancer dollar

Australia must invest more resources in cancer prevention and treatment infrastructure to prepare for a proportional increase in cancer incidence over the next 10 years, The Cancer Council Australia and Clinical Oncological Society of Australia (COSA) have advised the Productivity Commission.

Responding to an open study into the impact of medical technology on healthcare expenditure and advances in Australia over the next 10 years, The Cancer Council Australia and COSA jointly highlighted looming concerns in the fight against cancer as our population ages in the decade ahead and beyond.

The submission focused on the prospect of a future inhabited by more Australians with cancer, yet fewer taxpayers to support the associated medical costs. This conclusion is based on the convergence of three key factors: that cancer is predominantly an older person's disease; our population is forecast to age markedly over the next 10 years and beyond; and increased cancer incidence rates but reduced mortality rates in recent years suggest a trend towards greater numbers of cancer patients surviving for longer periods.

The Cancer Council Australia and COSA used the study to demonstrate the value of prevention and early detection in dramatically reducing future medical costs and how significantly improving Australia's cancer treatment infrastructure would better prepare it for technological change.

Up to half of the cancers currently diagnosed in Australia are preventable or could be treated successfully if detected early using available technology.

However, unacceptably high numbers of Australians continue to engage in high-risk behaviours such as smoking, exposing their skin to harmful ultraviolet radiation, making poor dietary choices and being physically inactive. The submission outlined a number of evidence-based measures to boost cancer prevention through health promotion.

The Cancer Council Australia-COSA position on screening and early detection of major cancers was also put forward in the submission, while the case for improving treatment infrastructure to prepare for emerging technologies – such as genetic screening and treatment, PET imaging, and molecular pathology – was robustly stated.

The Productivity Commission's draft preliminary report of the study is expected in April. A copy of the Cancer Council-COSA submission is available on the study website at: www.pc.gov.au/study/medicaltechnology/subs/sublist.html.

New position statements

The Cancer Council Australia has published three new position statements, Bowel cancer screening, Testicular cancer and State and territory travel and accommodation subsidy schemes.

Bowel cancer is the most common potentially fatal cancer affecting both men and women in Australia. The bowel cancer position statement reiterates The Cancer Council Australia's call for a national bowel cancer screening program targeting all Australians aged 50 and over. (In the 2004 federal election campaign, both the Coalition and the Australian Labor Party committed to national screening programs to commence from 2008.)

The testicular cancer statement promotes the evidence-based view that the present level of community awareness of testicular cancer appears to appropriate and in proportion to current incidence and mortality rates.

The travel and accommodation schemes statement calls for a Commonwealth-funded taskforce to examine inequities in access to cancer treatment across jurisdictions and between rural and urban areas, with the ultimate aim of improving access to services for people in disadvantaged regions.

A number of Sunsmart position statements have also been updated, including:

- n Screening and early detection of skin cancer
- n Tinting of car glass and window glass
- n Fake tans
- n Solariums

Cancer Council Australia position statements can be found at: www.cancer.org.au/positionstatements

Backyard now the extreme UV zone for Australians

From beach burns to backyard scorchings, The Cancer Council Australia has released initial findings from the first National Sun Survey that show Australians are almost twice as likely to get sunburnt at home than at the beach.

The Cancer Council revealed that almost one in five Australians were sunburnt on summer weekends.

Of those sunburnt, the survey showed that 32 per cent of Australians were burnt gardening or working around the home while 17 per cent were burnt at the beach or in the water. A further 24 per cent were burnt while enjoying outdoor activities such as picnics, BBQs and socialising.

Dr Andrew Penman, spokesperson for The Cancer Council Australia said, "Australians seem to be associating sun protection with the beach but not with their incidental outdoor activity. It takes as little as 15 minutes to burn in extreme UV radiation so covering up while pulling out the weeds or walking the dog is just as important."

The survey found that 8 per cent of Australians went to the beach over the weekend, however, 29 per cent spent time gardening or working around the home.

"We know that sunburn increases your risk of skin cancer later in life so we want to urge all Australians to Slip! Slop! Slap! whenever they're outdoors this summer," Dr Penman said. "Find shade, wear light clothing, put on a hat and sunglasses and apply sunscreen regularly to exposed skin."

According to The Cancer Council, skin cancer is predominantly caused by overexposure to ultraviolet radiation. However, sunburn isn't the only cause – tanning or too much sun, year after year, can also lead to the disease.

"Skin cancer is one of the most preventable cancers. We hope these new findings will remind Australians not to be complacent when they're out in the sun this summer," said Dr Penman.

The National Sun Survey reveals the sun-related behaviours of more than 5000 Australian adults aged 18 to 69 during peak UV times on summer weekends in 2003-04. The research was funded by the Cancer Councils across Australia and the Australian Department of Health and Ageing.

Australia takes lead in reducing cancer deaths – mortality rates lower than other developed nations

A new report, Cancer in Australia 2001, from the Australian Institute of Health and Welfare, shows that Australia has a lower cancer death rate than several other developed nations. The US, UK, Canada and New Zealand all recorded higher mortality rates than Australia.

The report has been welcomed by The Cancer Council Australia, which attributed much of the good news to population initiatives in prevention and early diagnosis and good access through Australia's health system to advances in treatment.

The Cancer Council's spokesman, Dr Andrew Penman, said the cancer death rate in Australia had fallen 17 per cent over 10 years and was now at its lowest level since records began in the 1970s.

"A significant part of Australia's success has been due to comprehensive programs in prevention and early detection, Dr Penman said. "Our low death rate from lung cancer and other tobacco related cancer is a dividend from three decades of tobacco control which has seen smoking rates drop to the lower levels than comparison countries; while our comprehensive approach to screening for breast and cervical cancer means that our outcomes for these cancers compares very favourably.

"Prevention has delivered extraordinary value for money," Dr. Penman said. "When you look at Australia's lower rates of lung

cancer incidence and mortality the argument is compelling - our death rates are 32 per cent lower than the US for males and a staggering 48 per cent for females. Although at 19,000 deaths from tobacco related disease each year, Australia still has a long way to go."

While welcoming the declining death rates, Dr Penman also sounded a note of warning about cancers where mortality or incidence are higher than in other countries. "Australia, because of its climate and lifestyle, leads the world in its high rates of melanoma yet this is one cancer whose rates could be substantially reduced by effective sun protection. The good news from melanoma, is that, through early detection, we achieve a much higher survival than other countries. For instance percentage of people who survive melanoma in Australia to almost double that of the US."

Dr Penman said that Australia's good performance was not uniform across all cancers. "In contrast to our success in cervical and breast cancers, we have very high death rates from bowel cancer. An absolute priority for the nation is to expedite the rollout of a national bowel screening program, to which the Federal Government has declared its commitment."

Success again for Pink Ribbon Day

2004 was another successful year for Pink Ribbon Day. So far, the 2004 event has raised \$1.7 million, surpassing the national target of \$1.6 million, with donations still coming in. A fantastic result!



Essential to the success of Pink Ribbon Day is the relationship with national supporters, including: 3M, Amcal, Angus & Coote, Australian Hearing, BAE Systems, Basketball Australia, Best & Less, HIC Medicare, Miller's Retail Group (including 1626, Crossroads, Katies and Silhouette), Rockmans and Sensis.

The funds raised will continue to support The Cancer Council Australia's breast cancer research initiatives, education programs and support services.



Cancer Council finds many Australians exposed by solariums

The Cancer Council Australia has released alarming statistics showing that over 290,000 Australians have been exposed to UV radiation in the past year due to solarium use.

"A solarium can emit UV radiation that is five times as strong as the midday summer sun," said the Chair of the National Sun Survey Research Committee, Professor David Hill.

"Subjecting skin to the excessive amounts of UV radiation that solariums emit can be dangerous. It is important that the public understand that using solariums will increase exposure to UV radiation and risk of skin cancer."

The research found the highest users of solariums were females aged 25 – 44 years.

"It may be that more women in the 25 to 44 age group are working indoors and so have less opportunity to tan in the sun," Professor Hill said. "They may also have more money available for solarium use than younger women."

Recent studies have shown that there has been an explosion in the number of solariums in NSW and Victoria over the past 10 years.

A voluntary code, the Australian and New Zealand Standard on Solaria for Cosmetic Purposes, is used to regulate the industry. Research released recently in Victoria showed that many of the regulations were not being met. This included solariums that were unsupervised, solariums that were providing access

without written parental consent to clients under the age of 18 and access to fair skin clients who will never tan.

"We are particularly concerned about unsupervised solariums that are coin operated or self serve, and those found in Health and Fitness centres without trained staff," said the Chair of The Cancer Council Australia's National Skin Cancer Committee, Craig Sinclair. "These solariums provide very easy access with little or no prior information or guidance for customers."

The Australasian College of Dermatologists spokesperson Dr Ian Hamann said Australia had the world's worst skin cancer rates and if we did nothing to minimise the risk of excessive UV exposure, the incidence of skin cancer would continue to rise.

"There is recent research suggesting a link between solarium use and the development of melanoma," Dr Hamann said. "Melanoma is one of the most common cancers affecting young adults and can be life threatening. There is no safe way to tan the skin using either natural or artificial UV light."

"Skin cancer is a preventable disease and dermatologists are seeing these cancers in otherwise healthy adults in their twenties and thirties."

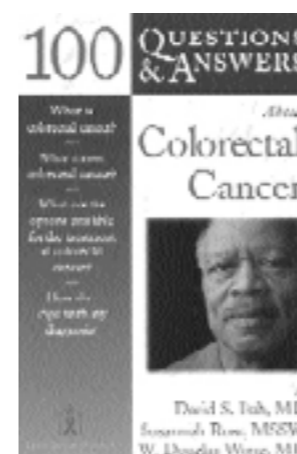
The solarium data is a part of the National Sun Survey, which reveals the sun-related behaviours of more than 5000 Australian adults, aged 18 to 69 during peak UV times on summer weekends in 2003-04. The research was funded by the Cancer Councils across Australia and the Australian Department of Health and Ageing.



BOOK REVIEWS

100 QUESTIONS AND ANSWERS ABOUT COLORECTAL CANCER

D S Bub, S Rose and W Douglas Wong
Published by Jones and Bartlett Publishers (2004)
ISBN: 0-7637-2035-6 268 pages plus index
RRP: \$22.95



This book is directed at the cancer patient, carers, family and friends, providing information covering the entire spectrum of the cancer journey. It has been written by two Colorectal Surgeons and a Clinical Social Worker at the Memorial Sloan-Kettering Cancer Centre. Throughout the book there are quoted comments made by patients which enables the reader to relate to the experience described.

The question and answer format of the book is very in depth in some areas yet only skims the surface in others. It is not possible for the authors to delve too deeply into the information due to the general purpose of the book, the individuality of the desired audience and the diversity of these cancers. It has been divided into 5 parts – The Basics, Risk and Prevention, Screening and Diagnosis, Treatment and Changes Cancer Brings.

My initial impression was that there was a lot of information given in the opening pages which could be a little daunting to the lay person. There are definitions set at the side of the pages which made it very busy. Cross referencing to other questions and answers throughout the book also made it disjointed in so much as obtaining relevant information.

Information given about the risk factors such as familial, age and lifestyle were very useful in the identification and prevention of colorectal cancer. The discussion of Familial Adenomatous Polyposis (FAP) and Hereditary Nonpolyposis Colon Cancer (HNPCC) explained the screening very well. The table which provided the screening guidelines of the American Society of Colon and Rectal Surgery was comprehensive yet easy to follow.

The workup staging was very thorough and well explained. However some of the explanations for imaging used in the work up could be too complicated and could lose the reader's comprehension.

The dietary table was extremely beneficial and the recommendations gave sound information which can be developed for the individual. Methods to reduce diarrhoea from radiation therapy and chemotherapy were also useful.

The different surgical procedures were discussed effectively as would be expected with the authors being surgeons and highlighted expected bowel function post operatively.

In discussing the recommended treatments some information

given in the chemotherapy section regarding current trends was outdated. It is very individual in the amount of side effects experienced and the level of coping in each occasion. This was well emphasised by the authors.

The final section covered Changes that Cancer brings. This provided excellent information for coping strategies for both the patient and the caregivers. It also highlighted the use of the team in the management of the cancer journey. This included the caregivers and their importance in this team.

This book does provide much valuable information for the patient with cancer and their significant others. The questions used are common questions cancer patients and their caregivers ask and the answers provided generally provide sufficient information. By using the index, answers may be obtained with ease.

Meredith Cummins
Riverina Cancer Care Centre, Wagga Wagga, NSW

BREAST CANCER 2nd EDITION

M Baum and H Schipper
Published by Health Press (2002)
ISBN: 1-903734-18-5 110 pages plus index

Breast Cancer is a UK publication, providing easy reference for clinicians at all levels. The guide enables the reader to further source more detailed information, if required, by supplying key references at the conclusion of each segment. There are nine segments exploring the basic concepts of breast cancer care. The use of diagrams and flow charts throughout the guide ensure key concepts are highlighted. The guide was published in 2002 and as a result there are some outdated points in the surgical procedures and management of advanced cancer segments.

The overview of breast cancer epidemiology is an easy to understand summation of current risk factors associated with breast cancer providing rationales behind past and present interpretation of risk. The authors become entangled when attempting to explain the difficult topic of risks and benefits of early stage breast cancer.

The guide's reference to rehabilitation in cancer care demonstrates the authors origin, however is beneficial in providing post-operative breast surgery education. The purpose of participating in clinical trials provides general practitioners with the basic principles to explain to their patient the rationale for considering a clinical trial. The guide acknowledges that the arena of breast cancer is changing and our approach to understanding the mechanisms behind its behaviour is challenging and there are many unanswered questions being explored.

Overall, the guide would be of interest to those involved



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2005 will be a special year for Australia's Biggest Morning Tea – we aim to have a world-record breaking event!

The Cancer Council Australia has registered with Guinness World Records to break the record for the 'World's Largest Simultaneous Tea Party'.



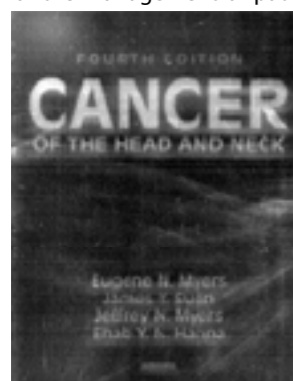
with caring for people with breast cancer. The guide would enable those who are not specialised in breast cancer care with enough information to answer questions and reassure their patient about the options being offered and why they are offered. All care providers would benefit by having this guide available as a quick reference exploring the rationales behind clinical decisions and to differentiate facts from fancies and fallacies.

Maree Bransdon
Royal Brisbane & Women's Hospital, Queensland

CANCER OF THE HEAD AND NECK (4TH EDITION)

E N Myers et al
Published by Myers (2003) Distributed in Australia by Elsevier
ISBN: 0-7216-9480-2. 825 pages plus index.
RRP: A\$468.60

Cancer of the Head and Neck aims to be a comprehensive review of the management of patients with tumours of the head and



neck and since its first edition in 1987 has been a highly regarded reference. Although targeted principally at surgeons, the book places great emphasis on the multi-disciplinary nature of the care of this group of diseases. Reflecting the practice in Head and Neck Oncology clinics, significant contributions to the book are made by experienced medical oncologists, radiation oncologists and allied health professionals, in addition to

those of well respected head and neck surgeons.

This new edition is a well-produced book now comprising 850 pages, with 37 chapters from 81 contributors practising in 5 countries. Since the last edition, the overall length of the book has been reduced by consolidating information given in the previous edition but adding additional information in fewer chapters. There is an updated section on head and neck pathology and a discussion of recent advances in molecular biology, with detail on the current understanding of the molecular and cellular pathogenesis and progression of cancer. The major component of the book remains 17 chapters on site specific cancers, each with a logical discussion through the relevant anatomy, pre-treatment evaluation, treatment options, surgical and non-surgical approaches and detailed treatment outcomes. The roles of chemoprevention of tumours and chemotherapy for treatment have now been separated into separate chapters, whereas general issues, such as medical and dental assessments, antibiotic usage, and treatment complications have been incorporated into the site-specific discussions. There is also strong emphasis on reconstruction, with more detail on practical aspects of oral rehabilitation, functional issues of rehabilitation of speech and swallowing, and their impact on quality of life. The management of cancer pain and the psychological aspects of cancer care have been combined into a single chapter on supportive and palliative care.

Although the number of contributors has been slightly reduced, there are a large number of new authors, helping the editors achieve their stated aim of producing a text that reflects contemporary practice. The addition of two new editors is a step designed to keep this reference relevant to contemporary

care in the future. Like the previous edition, this book is highly recommended to any surgeon practising or in training for head and neck oncological surgery and should be in the library of any institution participating in the care of head and neck cancer patients.

Kerwin Shannon
Sydney Head and Neck Cancer Institute, Royal Prince Alfred Hospital, NSW

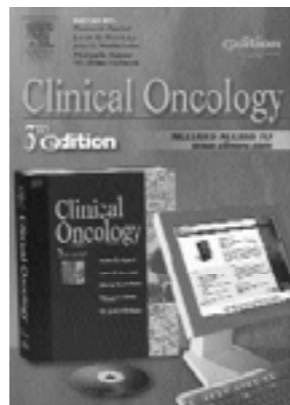
CLINICAL ONCOLOGY 3RD EDITION

M Abeloff, J Armitage, J Niederhuber, M Kastan, W McKenna (eds)
Published by Churchill Livingstone (2004)
ISBN: 0-443-06650-7
RRP: \$A563.20 (incl GST)

Reviewing a book on oncology is actually a rather daunting task and I have fewer qualms about admitting that this is my first oncology textbook review attempt than I do in actually doing the review. The first question I ask myself is "How can I possibly read more than 3000 pages in less than a month?" and the second is "What do I actually want out of a textbook in oncology in the first place?". The answer to the first question is that I cannot do it, nor should I attempt it – I need to be focused and targeted in my approach. As a medical oncologist, I think the answer to the second question is easier (and shows the way to address the first problem). I want an authoritative reference text that is clearly and logically set out; that contains a systematic approach to the whole of clinical oncology; that is well-referenced and that admits to controversy where controversy exists. An online version would also be a must in the modern world! One of my pet hates is the badly done index, so that will get extra scrutiny. A constant niggle in my brain is that in certain areas, such as the correct state-of-the-art chemotherapy regimen for stage 2 breast cancer, for example, any text book may be out of date before it is printed. Although, on reflection, there are vast areas in oncology where the content does not change very quickly, if at all, between editions.

So, to look in closer detail at my pet areas: the book itself is solid, and too heavy to hold. It is printed on good quality paper. The contents pages are well set out, in a logical manner, and I found them inviting - how appealing to be able to delve into a whole section on cancer-related venous thrombosis to check what the latest is?! The layout is excellent. There are very good illustrations and I was delighted to find a CD ROM of all the illustrations at the back of the book with download instructions into a slide show. Key points are put in a box at top of the chapter, with hints for exam candidates. There is then a clinical relevance box at the end, just in case one thought it were all becoming rather removed from reality. Overall, this book has been very well planned.

On-line version: this is the first textbook I have come across that not only has a CD ROM, but also an online version, access to which can be bought with the book. It has the whole book, plus updates inserted into the text where new information has come to light. So I would highly recommend that if you



are going to buy the book, you need to buy the online access too - it makes the whole thing so much better! For example, the book was printed in the first half of 2004 and the updates have been posted since 3rd June. There is even a news section so that items that haven't yet been inserted as updates in the text can be flagged. This gets rid of my complaint about books being out-of-date before they are printed. Tumour management sections had very timely updates, including recommendations on treatment of prostate, breast, colon and endometrial cancer.

However, just because the planning, layout and features are excellent, does not mean that this book is perfect. I found the section on Mucositis to be out-of-date with no news nor updates flagged. I suspect that supportive care in general is considered less important than other areas, although the chapter on Cancer in the Elderly is very good.

Overall, I would highly recommend this book, as it is comprehensive, well-planned and uses modern technology to the full. If I knew everything in it, I would be very knowledgeable indeed!

Dorothy Keefe
Dept Medical Oncology, Royal Adelaide Hospital, South Australia

CYTOLOGY OF SOFT TISSUE TUMOURS

M Ackerman, HA Domanski
Published by Karger (2003)
ISBN: 3-8055-7594-7 108 pages
RRP: US\$134.00

This monograph is the distillation of 25 years of experience encompassing over 3,000 cases of the cytological diagnosis of soft tissue tumours from a specialist referral centre in Lund, Sweden. The book is part of a series of monographs in clinical cytology edited by the 'father' of fine needle aspiration (FNA) cytology, Svante Orell. The two authors, Mans Akerman and Henryk Domanski, have extensive experience in the FNA diagnosis of these tumours.

Many anatomical pathologists in this country would balk at the prospect of diagnosing soft tissue tumours through FNA. The large number of different entities, their relative rarity and the existence of benign 'mimics' of malignant tumours make this a difficult area of diagnostic pathology at the best of times. The loss of architectural information that occurs when a lesion is sucked up a 22-gauge needle and then smeared on a slide, as well as the inherent sampling problems of large tumours means that most pathologists will insist on at least a few core biopsies before venturing an opinion. However, the ever-expanding number of publications on this topic and the push for less invasive methods of diagnosis means that the primary diagnosis of soft tissue tumours is emerging as an important new target for FNA. The authors acknowledge these concerns and emphasise the need for a multidisciplinary approach, specifically, correlation with clinical and radiological data. The book also details the numerous ancillary methods available for FNA material such as immunocytochemistry, electron microscopy, cytogenetics and DNA ploidy analysis.

At just over 100 pages, this hardcover book is somewhat slimmer than others in the series. However it maintains the high standards set by those preceding it. It is superbly illustrated with large, high-quality colour photomicrographs on almost every page. These stand out in contrast to many recent pathology texts that have used digital images with less than optimal results. Information on individual entities is very well presented with a description of the cytologic features, an adjacent summary of the pertinent features, and numerous tables comparing and contrasting features of entities within the differential diagnosis. The text is concise and not dogmatic. The overall organisation is excellent and the book is very easy to use.

This book deals with a highly specialised field within diagnostic cytology, a field that many cytopathologists are not comfortable or confident with. Its outstanding presentation and intelligent discussion make it a worthwhile reference for any cytology department which may potentially receive such specimens. Furthermore, for those who just want a complete set of this notable series, it's worth it!

Michael Buckland
Royal North Shore Hospital, NSW

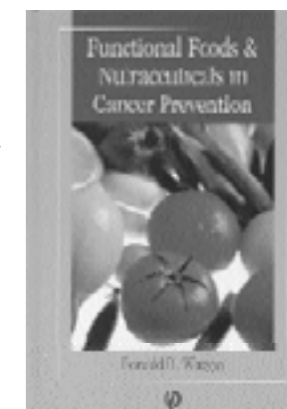
FUNCTIONAL FOOD & NUTRACEUTICALS IN CANCER PREVENTION

RR Watson
Published by Iowa State Press (2003)
ISBN: 0-8138-1854-0 296 pages plus index
RRP: A\$299.00

Interest in and use of complementary medicines that includes functional foods and nutraceuticals is expanding dramatically across the globe. This book is therefore a welcome addition to the increasing number aimed at disseminating a balanced view of current knowledge in this area. The specific aim of this book is to convey up to date information regarding the usefulness of dietary plants and nutritional supplements for cancer prevention to interested lay readers in addition to researchers and workers in the nutrition, food science and natural products communities.

It generally succeeds in this aim although the level at which it is written would frequently demand a dedicated and well informed lay reader, with some chapters requiring a reasonable scientific grounding. As a reference piece for researchers in complementary medicine it is extremely valuable in presenting a well balanced perspective on the potential benefits of functional foods and nutraceuticals for cancer prevention, while clearly defining the limitations of current research.

The book comprises sixteen chapters divided into two parts, Part I titled "Approaches to Cancer Prevention: Role of Nutrition" and Part II titled "Fruits, Vegetables, and Herbs in Cancer Prevention". Throughout the book there is a fair amount of duplication of topic areas, for example the topic of soy-derived isoflavones for breast cancer is addressed in at least three separate chapters. Having said this it is often helpful in reinforcing concepts to have them presented in a



slightly different manner more than once. There are a number of relatively minor errors and omissions throughout. Firstly a glossary of terms is a must for a book such as this and the title words "functional foods" and "nutraceuticals" should have been defined at the outset. While the 35 contributing authors together provide an excellent and well rounded perspective on the topics addressed there is a lack of editorial rigour demonstrated by the inconsistency in referencing systems employed in the various chapters. In addition there are a number of important typographical errors such as the reference to the "potential carcinogenic activity of chlorophyll" when clearly the author intended "anti-carcinogenic activity". The writing style in some chapters also differs from that employed in the bulk of the text, an almost inevitable consequence of the large number of contributors.

On the whole there are many extremely useful tables showing recommendations for appropriate food intakes and biological activities in various foods and food components and the figures are generally easy to follow. A number of important points are frequently highlighted throughout this book. Firstly the difficulty involved in attempting to extrapolate in vitro and animal model research to the human situation and secondly the complex interactions and synergies that are inherent in nutraceuticals and whole functional foods that can result in the failure of simple extracts to demonstrate expected benefits.

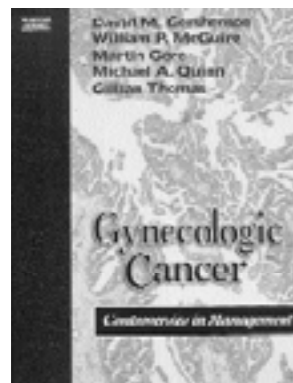
Overall this book is an extremely useful reference, competently describing the current in vitro, in vivo and clinical trial and epidemiological data in this area and it would make a worthwhile addition to the libraries of complementary medicine researchers.

Phillip Cheras
Australian Centre for Complementary Medicine
Education and Research
University of Queensland

GYNECOLOGIC CANCER: CONTROVERSIES IN MANAGEMENT

D M Gershenson et al (eds)
Published by Churchill Livingstone (2004)
ISBN: 0-443-07142-X 984 pages plus index
RRP: A\$427.90

Gynecologic Cancer: Controversies in Management arose from a desire to publish a new edition of Malcolm Coppleson's classic text Gynecologic Oncology. This new text was to be unique, international and comprehensive in its focus and the five editors have clearly met this challenge.



The books 'uniqueness' relates to the focus on controversies that exist in the management of gynaecological cancer. Although in some chapters controversial issues are debated – an example being the role of lymph-adenectomy in the management of early stage endometrial cancer – other chapters have attempted to raise awareness of contentious issues. This balanced and objective approach allows the reader to draw their own conclusions from the current research that each chapter describes in a systematic and considered format.

The international perspective of the book is apparent throughout. The editors represent four countries: Australia, Canada, United Kingdom and United States whilst expert contributors are from some 12 countries. Thus, renowned clinicians in the field of gynaecological cancer inform the reader of contemporary views from a global viewpoint, ensuring relevance to all regardless of where they practice.

The book consists of 71 chapters, divided into nine sections. The initial four sections address the epidemiology, diagnosis, pathology and management of gynaecological malignancies by organ site whilst the following five sections explore subjects that textbooks do not routinely consider. Thus topics include complications of cancer treatment, symptom management, sexuality and fertility, gynaecologic cancer in pregnancy, melanoma of the female genital tract, biostatistics and clinical trials, imaging of gynaecological malignancies, interventional radiotherapy and biologic therapy. Such a comprehensive approach ensures both a multidisciplinary and holistic focus.

The relatively short but extensively referenced chapters make this text an excellent resource for all professionals who are involved with women with gynaecological cancer, regardless of their level of experience.

Kathryn Nattress
Sydney Cancer Centre, NSW

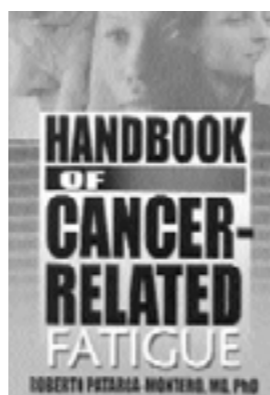
HANDBOOK OF CANCER- RELATED FATIGUE

R Patarca-Montero
Published by The Haworth Medical Press (2004)
ISBN: 0-7890-2167-6

The Handbook of Cancer-Related Fatigue addresses a wide array of areas related to fatigue. The first chapter discusses definitions of fatigue and cancer-related fatigue, the relationship between certain socio-demographic factors and fatigue as well as tools that attempt to measure fatigue. The next chapter devotes many pages to the relationship between cancer related fatigue and quality of life as well as the relationship between the major cancer treatment modalities such as surgery, chemotherapy and radiotherapy and fatigue. This is followed by a description of possible causative factors such as haematological, endocrine, psychological and nutritional factors. The final chapter looks at treatment of cancer related fatigue including graded exercise, sleep therapy, cognitive-behavioural therapy, nutritional, pharmacological, complementary and alternative therapy and immunotherapy. I found the section on graded exercise particularly interesting and useful from a clinical perspective.

The second half of the book consists of 226 pages of references, which at first seems very impressive. Unfortunately when reading the text the large number of references became a distraction rather than a benefit. In some areas I read four lines of text followed by any where between 18 lines and four pages of references. I couldn't help but think this was an example of that old adage that "more is not always better".

While the book provides a comprehensive list of the literature related to fatigue there appears to be minimal comment on the



level of evidence produced by the numerous research articles cited. Given the abundance of material written on the area this would have been useful for the clinician in terms of knowing what is worth incorporating into practice.

The promotional material on the back cover says the book has been written for patients with cancer as well as clinicians and researchers. In my clinical experience there are very few patients, without fatigue let alone those with fatigue, who would have the energy to wade through such dense text. Having said that it is important to highlight the usefulness of the summary statements in italics at the beginning of each section. I used the summary statements to decide whether or not to work through the lengthy paragraphs for further detail. When I did seek further detail or explanation on a particular area it was there.

The author, Roberto Patarca-Montero MD, PhD, currently works at the University of Miami School of Medicine. He has done a considerable amount of work in the area of chronic fatigue syndrome and has published widely in related journals. Consequently in this book he tends to draw parallels between cancer related fatigue and chronic fatigue syndrome that adds a different dimension for the cancer-focused reader and is very interesting.

Overall this book is very interesting and provides a comprehensive overview of a wide range of topics associated with fatigue. It also provides an exhaustive list of the literature published on the area of fatigue and cancer-related fatigue in particular. This book would suit the health professional, from any discipline, who wants to understand the complex nature of fatigue and its impact on patients with cancer as well as their significant others.

Donna Milne
Peter MacCallum Cancer Centre, Melbourne, Victoria

INFECTIONS IN CANCER PATIENTS

JN Greene
Published by Marcel Dekker, Inc. (2004)
ISBN: 0-8247-5437-9 522 pages plus index

Infections in Cancer Patients is a comprehensive and extremely detailed edited volume (first edition), which holds the premise that infections in cancer are predictable. Since infections are a major cause of morbidity and mortality in the patient with cancer, being able to predict, recognise early, identify and manage them is the aim of the book.



Distinct immunodeficiencies are related to specific malignancies and their treatment, resulting in predictable opportunistic infections.

Description is made of the major immune deficits inherent in each malignancy described, as well as how the malignancy and its therapy alters the immune system over time and leads to anatomical changes that predispose to the changing spectrum of pathogens.

The book outlines the periods of vulnerability associated with chemotherapy regimes, the ensuing neutropenia and cell mediated immune deficiencies. Consequently anti-microbial therapy can be altered to reflect the changes in the predominant pathogen expected.

The introductory chapters outline mechanisms of host defence and the composition of what is normal microbial flora in various sites of the body.

It then goes on to look at 10 distinct types of haematological lymphoreticular malignancies, detailing ALL, AML, Hairy cell leukaemia, CLL, CML, Myelodysplastic Syndromes, Multiple Myeloma, Hodgkin's and Non-Hodgkin's Lymphomas as well as infectious complications associated with stem cell transplant recipients.

The chapters that follow are related to infectious complications of the following solid tumour malignancies; brain, head and neck, lung, breast, gastrointestinal, liver and biliary tract, neuroendocrine, bladder and kidney, gynaecological, sarcomas and cutaneous malignancies.

The next major section in the book covers system-specific infections, describing central nervous system, pulmonary, cardio-vascular, gastrointestinal, genitourinary, bone, joint and soft tissue infections, and then skin infections.

The book goes on to describe the infectious complications of cancer treatment that is not chemotherapy, specifically chapters on radiation therapy, surgery and then an interesting chapter on catheter related infections.

There is a major section exploring unique infections in cancer patients (fungal and parasitic). Also in this section is a short chapter on HIV related malignancies.

The final section assesses the best available evidence for measures to avert infections, including anti-microbial prophylaxis and vaccination, and analyses methods of handling fungal and parasitic infections.

The book has 45 authors, 39 of whom are U.S. clinicians and researchers. It is edited by John Green who is Chief of Infectious diseases at the H Lee Moffitt Cancer Center and professor of medicine at the University of South Florida.

The book is well-organised and easy-to-read. It is well-referenced and has an evidence-based approach.

Infections in Cancer Patients would be a good resource to have accessible in oncology wards and outpatients departments.

Margherita Nicoletti
Clare Holland House, ACT

MAGNETIC RESONANCE IMAGING IN LIVER DISEASE; TECHNICAL APPROACH, DIAGNOSTIC IMAGING OF LIVER NEOPLASMS, FOCUS ON A NEW SUPERPARAMAGNETIC CONTRACT AGENT

Thomas J. Vogl, Riccardo Lenciono, Renate M. Hammerstingl, Carlo Bartolozzi
Published by Georg Thieme Verlag (2003)
ISBN: 3-13-133191-7 253 pages plus index
RRP: €99.00

Magnetic Resonance Imaging and Liver Disease has been written at a time when there have been some significant improvements in MRI scanning of the liver with the development of new imaging protocols and contrast agents, especially the new super paramagnetic contrast agents.

The book has a concise and organised approach to the most commonly encountered topics facing radiologists and



physicians interpreting MRI scans of the liver.

The book is broken down into twelve chapters covering hepatic anatomy, diffuse, benign and malignant hepatic disease. The book is most useful to the MRI radiologist and technologist as it has an in-depth discussion about magnetic resonance protocols, comparing the outcome of the MRI imaging to that of ultrasound and helical CT scanning.

In Chapter 2 on liver anatomy, it may have been of value to expand the section on normal variants.

Chapters 8 and 9, dealing with pre-therapeutic diagnosis and treatment will be specifically useful to radiologists and clinicians alike, as it deals with different imaging modalities and contrast agents as well as highlighting tumour response to percutaneous ethanol injections, trans-catheter arterial chemoembolisation and laser induced thermotherapy.

Classification of detected liver lesions may be difficult using biphasic helical scanning as well as unenhanced MRI in some cases. Previously computed tomography during arterial portography (CTAP) has become the established method of pre-operative diagnostic evaluation as it has a high sensitivity for detecting liver lesions. The disadvantage of this procedure is its invasiveness and a high rate of false positive results.

Improved differentiation of liver tumours is however possible using extracellular MRI contrast agents, namely superparamagnetic iron oxide particles which are absorbed by RES cells of the normal liver, and by tumour consisting of RES. Iron oxide enhanced MRI is thus becoming an acceptable non-invasive technique which will provide high pre-operative diagnostic efficiency and can replace CTAP in many cases.

In general, the spectrum of disease covered as well as the strategies given to evaluate the liver in this book is impressive. After reading this book, radiologists and physicians should feel comfortable understanding the imaging strategies applied to screening for hepatic disease and how this differs from the pre-operative diagnostic work-up, as well as evaluating the liver after different forms of treatment.

This text can certainly help confident image interpretation and management of liver disease and will provide useful information for educating referring physicians.

Lourens Bester
Mayne Health Diagnostic Imaging
Westmead Private Hospital, NSW

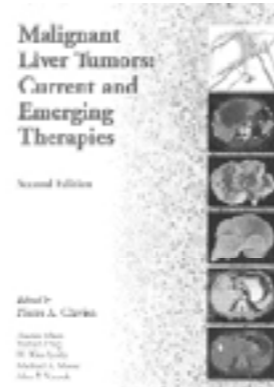
MALIGNANT LIVER TUMORS: CURRENT AND EMERGING THERAPIES (Second Edition)

P A Clavien (ed)
Published by Jones and Bartlett Publishers (2004)
ISBN: 0-7637-1857-2 469 pages plus index
RRP: \$278.30

Malignant liver tumours are a major health problem throughout the world. Over the past two decades there has been a rapid growth in our understanding of the epidemiology, etiology and treatment options for these tumours. Keeping pace with this explosion of information is difficult and hence the timely release of the second edition of Malignant Liver Tumors: Current and Emerging Therapies. This text, edited by five respected clinicians in the field of hepatic oncology, provides an excellent overview of the multidisciplinary approach to primary and secondary tumours of the liver. The strict editorial process has helped make each chapter balanced and well-referenced with minimal overlap of information throughout the book. This edition contains 10 additional chapters and highlights include living-related transplantation, laparoscopic liver resection, oncoviral treatments, as well as an excellent review of alternative medicine options.

This book is attractively presented in hard cover and is conveniently divided into five parts made up of chapters from contributing experts. The book flows well with the intent that the chapters can either be read sequentially or on their own with equal satisfaction. Black and white illustrations are generally well presented and the tables and graphs are clear and well referenced. The only minor criticism is the poor quality of some of the operative photographs.

A helpful short summary is provided at the end of most chapters and several key references are flagged. Although this provides an excellent update on frequently used as well as more experimental treatment options for liver malignancies, by the nature of this being a textbook, the references in most chapters are already 3-4 years out of date. Having said that, this still provides a convenient and comprehensive review of the subject. Specialist surgeons or physicians will not find detailed operative or diagnostic information with regard to malignant liver tumours, but the wide coverage of epidemiological information and palliative treatment options more than adequately makes up for this. The chapter on neoadjuvant treatment of colorectal liver metastases highlights the evolving, multidisciplinary management which inevitably will lead to a larger number of patients being offered definitive or palliative treatment. Some of the discussion in this chapter was, by necessity, repeated elsewhere in the book but this repetition has been kept to a minimum. Several of the tables in a number of chapters were placed out of context which made for difficult reading but again this is a minor criticism only. The chapters on liver malignancies in particular geographical areas (Asia, Africa and South America) and in special populations (HIV patients, the elderly and the pregnant etc) were especially informative.

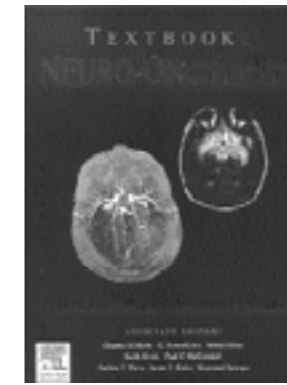


I strongly recommend this book to anyone interested in malignant liver tumours. This text will be an excellent addition to any library on this subject

Tom Hugh
Royal North Shore Hospital, NSW

TEXTBOOK OF NEURO-ONCOLOGY

MS Berger and MD Prados
Published by Elsevier Saunders (2005)
ISBN: 0-7216-8148-4 829 pages plus references



The sub-specialty of neuro-oncology is slowly raising its profile. Changes in the natural history of other cancer types has resulted in increasing clinical dilemmas associated with brain metastases and the appearance of temozolomide for high-grade gliomas has created renewed interest in adjuvant and palliative therapies.

As a consequence, a number of encyclopaedic textbooks have appeared including this new volume from Mitchell Burger and Mike Prados. The book is divided into essential principals, ranging from basic science, diagnosis and treatment principals through to detailed chapters on the management of specific tumours. As with many textbooks there is a serious problem with content, consistency and structure.

The chapters vary in their detail and value. For example, the chapter on primary cerebral lymphoma is disappointing in its discussion of chemotherapy and the relative controversies regarding current treatment strategies. Similarly, it is difficult to understand how the chapter on glioblastoma warrants six pages whereas that of anaplastic astrocytoma required 21 pages and nine authors.

Frankly, it irritates me that many chapters were multi-authored with five or six authors for five page chapters. Further, I don't understand why the section on brain metastases requires a chapter for each individual tumour type given the fact that treatment principals are very similar and the chapters could have been incorporated into a broad discussion. On the other hand there are some excellent chapters on uncommon tumour types that are useful for the practising oncologist seeking information on rare pathology.

There is an extensive section of paediatric neuro-oncology that unfortunately duplicates much of the information in the earlier chapters for similar diseases. Thus, for example the two chapters on adult and paediatric medulloblastoma can be almost super imposed. It is extraordinary that the medulloblastoma chapter in the paediatric section provides one paragraph on chemotherapy.

Overall, this is a disappointing textbook in terms of content, structure and style. There are elements within it that may be helpful for the practising neuro-oncologist but I would not recommend it ahead of other sources of information.

Mark Rosenthal
Cancer Trials Australia, Victoria

UROLOGIC ONCOLOGY

JP Richie; AV D'Amico
Published by Elsevier Saunders (2004)
ISBN: 0-7216-0003-4 783 pages plus references and index

Surgery has been the dominant modality for the treatment of genitourinary cancers (GU) since this subspecialty developed and continues to be so. Other modalities such as radiotherapy and chemotherapy have taken a rear seat for these cancers more than in any other group. Even hormone therapy for prostate has a surgical alternative (bilateral orchidectomy) which remains the gold standard. The treatment of most other cancer types is moving more and more towards combining modalities for optimum effect but so far this trend has been resisted in GU cancers. For example, GU cancers are the only group that does not have a routine role for adjuvant chemotherapy for any of its tumours.

Little wonder that this textbook of urological oncology has a heavy emphasis on surgery and surgical techniques. Important modalities such as radiotherapy and systemic therapies are discussed but usually as one or two paragraphs at the end of chapter for the relevant cancer. This compares to no less than three separate chapters discussing various aspects of nephrectomy for renal cell cancer. The treatment of metastatic prostate cancer has a flimsy (albeit knowledgeable) five pages on systemic therapy and radiotherapy compared with five chapters discussing various surgical approaches to prostatectomy.

This is a textbook for the urologist or urology trainee and details the finer points of the surgical approach to this disease group. One oasis for the non-surgeon is the discussion of combined modality therapy for bladder cancer that deals comprehensively with the common arguments against this approach. The introductory chapter on molecular and cellular biology was also well worth the read for all oncologists, not just those interested in GU cancers.

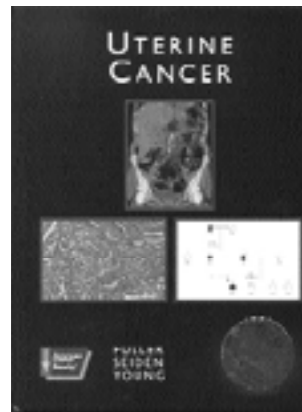
In summary, if you use a scalpel on a regular basis then this book is for you. If not, try Principals and Practices of Genitourinary Oncology (Raghavan ed).

Howard Gurney
Department of Medical Oncology,
Westmead Hospital, NSW



UTERINE CANCER

AF Fuller Jr, MV Seiden, RH Young
Published by BC Decker (2004)
ISBN: 1-55009-163-8



This text on uterine cancer is an excellent addition to the American Cancer Society's Atlas of Clinical Oncology, which is a series of monographs on various cancer sites.

The editors are experts in gynaecologic oncology, medical oncology and pathology, and their stated aim "is to provide a comprehensive overview of epidemiologic, pathologic, biologic and treatment paradigms relevant to both epithelial cancers and mesenchymal tumours of the uterine corpus".

They have succeeded in their aim. They have produced a readable, well-organised and informative overview of their subject. A wide-range of people including gynaecologists, oncologists and anyone with an interest in endometrial carcinoma, which is the most common gynaecological cancer in the developed world, will enjoy this book.

There are 16 chapters from 23 contributors, 18 of whom are from the Harvard Medical School, one from Vancouver, three from Toronto and one from Miami and the text naturally presents a North American perspective. However, this does not detract from the wealth of well referenced information (up to 2002) which brings a fresh and detailed examination of several topics not usually covered in standard texts.

As well as discussing the usual aspects of pathology and treatment of endometrial carcinoma, there is a thoughtful chapter by Arlan Fuller on Prognostic & Predictive Factors in Endometrial Carcinoma, which considers "the importance of prognostic factors that are independently important in predicting survival or recurrence of disease".

One of the major strengths of this text is the inclusion of detailed discussion on controversial topics. Gynaecologists will be particularly interested in the chapters on screening for endometrial carcinoma, the value of pelvic ultrasound, the significance of positive peritoneal cytology, the evaluation and management of women who are on Tamoxifen therapy and the role of conservative hormonal treatment for women with endometrial cancer who wish to preserve fertility.

Oncologists will find helpful and critical chapters on radiation and post-surgical management, and the management of recurrent and metastatic disease, which is a reminder that endometrial carcinoma is not such a 'benign' disease. The chapters on Pathology and Molecular Pathogenesis of endometrial cancer are beautifully written and make difficult subjects accessible to the non-expert.

The text is well laid out with good clinical and pathological photographs. The accompanying CD contains the full text and images which is good for travellers. This is a book one can "dip" into or read systematically if depth of knowledge is required. I have no hesitation in recommending this text to anyone with an interest in endometrial carcinoma. Gynaecologists should own a copy and all medical and hospital libraries should have this book on their shelves.

Ian Hammond
King Edward Memorial Hospital, WA



CALENDAR OF MEETINGS

CALENDAR OF MEETINGS – AUSTRALIA AND NEW ZEALAND

Date	Name of Meeting	Place	Secretariat
2005			
March			
17-20	Australasian Braceotherapy Group	Alice Springs NT	Pharma Events Ph: +61 2 9280 0577 Fax: +61 2 9280 0533 Email: conferences@pharmaevents.com.au
April			
15-17	RACR Paediatric Oncology Course (College of Radiologists)	Sydney NSW	Pharma Events Ph: +61 2 9280 0577 Fax: +61 2 9280 0533 Email: conferences@pharmaevents.com.au
May			
15-18	Australasian College of Dermatologists Annual Scientific Meeting	Perth WA	Australasian College of Dermatologists PO Box 2065 Boronia Park NSW 2111 Tel: +61 2 9879 6177 Fax: +61 2 9816 1174 Email: info@dermcoll.asn.au Web: www.dermcoll.asn.au
25-28	Trans-Tasman Radiation Oncology Group Annual Scientific Meeting	Darwin NT	Pharma Events Ph: +61 2 9280 0577 Fax: +61 2 9280 0533 Email: conferences@pharmaevents.com.au
July			
7-9	Royal College of Nursing Australia National Conference	Glenelg SA	Royal College of Nursing Australia PO Box 219 Deakin West ACT 2600 Tel: +61 2 6282 5633 Fax: +61 2 6282 3565 Email: Nicole@rcna.org.au Web: www.rcna.org.au
21 -23	Cancer Nurses Society Of Australia	Hobart TAS	Pharma Events Ph: +61 2 9280 0577 Fax: +6 1 2 9280 0533 Email: conferences@pharmaevents.com.au
August			
10-13	Medical Oncology Group Australia Annual Scientific Meeting	Hobart TAS	Pharma Events Ph: +61 2 9280 0577 Fax: +61 2 9280 0533 Email: conferences@pharmaevents.com.au
21-26	11th World Congress on Pain	Sydney NSW	International Association for the Study of Pain (IASP) 909 NE 43rd Street Suite 306 Seattle USA Tel: +1 206 547 6409 Fax: +1 206 547 1703 Email: iaspdesk@juno.com Web: www.iasp-pain.org
October			
6-9	Royal Australian and New Zealand College of Radiologists, Faculty of Radiation Oncology Annual Scientific Meeting	Sydney NSW	RANZCR Level 9, 51 Druiett Street Sydney NSW 2000 Tel: +61 2 9268 9777 Fax: +61 2 9268 9799 Email: ranzcr@ranzcr.edu.au Web: www.ranzcr.edu.au
7-8	28th Annual Oncology Nurses Group Conference	Cairns QLD	Oncology Nurses Group Conference Secretary Queensland Cancer Fund PO Box 201 Spring Hill QLD 4004 Tel: +61 7 3258 2263 Fax: +61 7 3257 1306 Email: ADewar@qldcancer.com.au Web: www.qldcancer.com.au
November			
15-18	32nd Clinical Oncological Society of Australia Annual Scientific Meeting	Brisbane QLD	Pharma Events Ph: +61 2 9280 0577 Fax: +61 2 9280 0533 Email: conferences@pharmaevents.com.au



CALENDAR OF MEETINGS – International

Date	Name of Meeting	Place	Secretariat
2005			
March			
3-5	3rd International Symposium on Targeted anticancer Therapies	Amsterdam Netherlands	NDDO Research Foundation c/o Convenience Conference Management PO Box 77 Harmelen 3480 DB Netherlands Tel: +31 348 567 667 Fax: +31 348 446 057 Email: congress@nddo.org Web: www.nddo.org
3-6	58th Annual Cancer Symposium of the Society of Surgical Oncology	Atlanta Georgia USA	D.K. Kubis - Society of Surgical Oncology 85 W Algonquin Rd Suite 55 Arlington Heights IL - 60005 Tel: +1 (847) 427 1400 Fax: +1 (847) 427 9656 Web: www.surgonc.org/
7-9	Functional Genomics and Animal Tumour Models	Madrid Spain	CNIO-Spanish National Cancer Centre C/ Melchor Fernandez Almagro, 3 Madrid 28029 Spain Tel: +34 91 2246900 Fax: +34 91 2246980 Email: ccc@cnio.es Web: www.cnio.es/ccc
11-13	7th Shaukat Khanum Memorial Cancer Symposium	Lahore Pakistan	Shaukat Khanum Memorial Cancer Hospital and Research Centre Johar Town Lahore Pakistan Tel: +92 42 5180 725-34 Fax: +92 42 5180 723/54 Email: trainingmanager@skm.org.pk Web: www.shaukatkhanum.org.pk
13-16	13th International AEK-AIO Cancer Congress	Wurzburg Germany	BioMedTec Franken e.V. Friedrich-Bergius-Ring 15 Wurzburg 97076 Germany Tel: +49 931 2998875 Fax: +49 931 299 8894 Email: sk@biomedtec-franken.de Web: www.aek-aio-congress.de
15-16	Building Palliative Care programs in Hospitals	Miami USA	Center to Advance Palliative Care Mount Sinai School of Medicine 1255 Fifth Avenue, Suite C-2 New York New York 10029-6574 USA Tel: +1 212 201 2680 Web: www.capc.org
17-19	6th International Symposium and Expert Workshops on Leukemia and Lymphoma	Amsterdam Netherlands	VU University Medical Center Dept. PAOG P.O Box 7057 Amsterdam 1007 MB Netherlands Tel: +31 20 4448444 Fax: +31 20 4448445 Email: icm.vanbaardwijk@vumc.nl Web: www.vumc.hemonc.nl
18-19	3rd Annual Atlanta Lung Cancer Symposium	Atlanta USA	Imedex 70 Technology Drive Alpharetta Georgia 30005 USA Tel: +1 770 751 7332 Fax: +1 770 751 7334 Email: c.chase@imedex.com Web: www.imedex.com/calendars/oncology.htm
18-19	National Update on Advances in Urology	New Orleans USA	Imedex 70 Technology Drive Alpharetta Georgia 30005 USA Tel: +1 770 751 7332 Fax: +1 770 751 7334 Email: c.chase@imedex.com Web: www.imedex.com/calendars/urology.htm
18-20	Second Annual Winter Lung Cancer Conference	Florida USA	Cadent medical Communications 1707 Market Place Boulevard, suite 350 Irving Texas 75063 USA Tel: +1 972 929 1900 Fax: +1 972 929 1901 Email: jmccown@cadentmed.com
21-25	Cancer in Developing World	Cairo Egypt	Fakkous Center for Cancer and Allied Diseases 11Boulos Hanna Street, Dokki Cairo Egypt Tel: +1 972 929 1900 Fax: +1 972 929 1901 Email: jmccown@cadentmed.com

Date	Name of Meeting	Place	Secretariat
31 – Apr 02	Lymphoma The Next Questions	Florida USA	Imedex 70 Technology Drive Alpharetta Georgia 30005 USA Tel: +1 770 751 7332 Fax: +1 770 751 7334 Email: c.chase@imedex.com Web: www.imedex.com/calendars/oncology.htm
April			
16-20	96th Annual Meeting of the American Association for Cancer Research	Ahaheim California USA	AACR 615 Chestnut Street 17th Floor Philadelphia, PA USA 19106-4404 Tel: +1 21 5440 9300 Email: meetings@aacr.org
19-24	10th International Congress on Oral Cancer	Crete Greece	International Congress on Oral Cancer 509 B Sarita Vihar New Delhi 110 044 India Tel: +91 11 694 4551 Fax: +91 11694 4472 Email: cancerak@del6.vsnl.net.in
25-27	The 4th Regional Conference of APOCP	Zibakendar Rasht Iran (Islamic Republic of)	Gastrointestinal & Liver Diseases Research Center (GLDRC) Razi Hospital, Sardar Jangle Ave. Rasht 41448-9565 Iran Islamic Republic of) Tel: +98 131 5535116 Fax: +98 131 5534951 Email: secretary@iran-apocp.org Web: www.iran-apocp.org
28-30	1st International Symposium on Cancer and the Lymphovascular System	San Francisco USA	University of California, San Francisco Office of CME 3333 California Street, Suite 450 San Francisco California 94143 USA Tel: +1 415 476 4252 Fax: +1 415 502 1795 Email: graysonk@ocme.ucsf.edu.au Web: www.iran-apocp.org
28 – May 01	Oncology Nursing Society's 30th Annual Congress	Orlando USA	Oncology Nursing Society 125 Enterprise Drive Pittsburgh Pennsylvania 15275-1214 USA Tel: +1 86 6257 4667 Email: meetings@ons.org Web: www.ons.org
29 – May 06	22nd International Papillomavirus Conference and Clinical Workshop	Vancouver Canada	Venue West Conference Services Ltd 645-375 Water Street Vancouver BC V6B 5C6 Canada Tel: +1 604 681 5226 Fax: +1 604 681 2503 Email: congress@venuewest.com Web: www.hpv2005.org
May			
05-08	Second quadrennial meeting of the World Federation of Neuro-Oncology EANO VI	Edinburgh UK	Federation of European Cancer Societies Avenue E. Mounier 83 Brussels 1200 Belgium Tel: +32 2 775 0205 Fax: +32 2 775 0200 Email: EANO6@feces.be Web: www.feces.be
13-17	41st Annual Meeting of the American Society of Clinical Oncology (ASCO)	Orlando USA	American Society of Clinical Oncology (ASCO) 1900 Duke Street, Suite 200 Alexandria Virginia 22314 USA Tel: +1 703 299 0150 Fax: +1 703 299 1044 Email: asco@asco.org Web: www.asco.org
30 – Jun 01	CNIO Cancer Conference: MAP Kinases and Cancer	Madrid Spain	CNIO _ Spanish National Cancer Centre C/ Melchor Fernandez Almagro, 3 Madrid 28029 Spain Tel: +34 91 224 6900 Fax: +34 91 224 6980 Email: ccc@cnio.es Web: www.cnio.es/ccc
June			
01-04	13th Reach to Recovery International Breast Cancer Support Conference	Athens Greece	Hellenic Association of Women with Breast Cancer 21-23 Leosthenous str. Piraeus 185 36 Greece Tel: +30 210 41 80 006 Fax: +30 210 41 80016 Email: breastca@otenet.gr Web: www.breastcancerhellas.gr

Date	Name of Meeting	Place	Secretariat
2-5	EHA-10: 10th Annual Meeting of the European Haematology Association	Stockholm Sweden	Eurocongres Conference Management Jan van Goyenkade 11 Amsterdam Netherlands NL-1075 HP Tel +31 20 679 3411 Eha2005@eurocongres.com www.ehaweb.org
8-11	9th International Conference on Malignant Lymphoma	Lugano Switzerland	Olga Jackson Lymphoma Conference Secretary viale Cattaneo 23 Lugano - 6900 Tel: +41 91 921 4561 Fax: +41 91 921 4563 Web: http://www.lymphcon.ch/
08-12	World Conference on Breast Cancer	Halifax Canada	World Breast Cancer Organization, Inc 841 Princess Street Kingston Ontario K7L 1G7 Canada Tel: +1 613 549 1118 Fax: +1 613 549 1146 Email: wbcwbc@coeco.net Web: www.worldbreastcancerconf.ca
15-17	Sarcoma Meeting Stuttgart 2005	Stuttgart Germany	Olgahospital Stuttgart Postfach 103070 Stuttgart 70176 Germany Tel: +49 711 992 2466 Fax: +49 711 992 2462 Email: lhazlewood@olgahospital.de Web: www.sms2005.de
15-18	World Congress on Gastrointestinal Cancer	Barcelona Spain	Imedex 70 Technology Drive Alpharetta Georgia 30005 USA Tel: +1 770 751 7332 Fax: +1 770 751 7334 Email: meetings@imedex.com Web: www.worldgicancer.com
16-18	International East-West Symposium on Nasopharyngeal Cancer	Toronto Canada	Princess Margaret Hospital, University of Toronto 610 University Avenue, Room 5-983 Toronto Ontario M6G 2M9 Canada Tel: +1 416 946 2123 Fax: +1 416 946 4586 Email: Fei-Fei.Lui@rmp.uhn.on.ca
23-26	2nd Quadrennial Meeting of the World Federation of NeuroOncology	Edinburgh Scotland	EANO 6 Secretariat Federation of European Cancer Societies Avenue E Mounier 83 Brussels, Belgium 1200 Tel: +32 0 2775 0201 Email: eano6@fecsb.be
26-30	XVIII World Congress of Gerontology	Rio de Janeiro Brazil	ACE Eventos SHN Qd. 02 BL. E Sobreloja 50 Kubitschek Plaza Hotel Brasilia-DF CEP 70710-908 Brazil Tel: +55 61 328 6912 Fax: +55 61 328 6912 Email: Secretariat@aceeventos.com.br Web: www.gerontology2005.org.br
July			
3-6	11th World Conference on Lung Cancer	Barcelona Spain	Heather Drew Imedex 70 Technology Drive Alpharetta - 30005 - Georgia Tel: +1 770 751 7332 Fax: +1 770 751 7334 Web: www.2005worldlungcancer.com/2005WLC/
14-16	2005 Gastrointestinal Oncology Conference	Arlington USA	International Society of Gastrointestinal Oncology (ISGIO) 200 Broadhollow Rd Melville New York 11747 USA Tel: +631 390 8390 Fax: +63 13 935091 Email: email@isgio.org Web: www.isgio.org
September			
13-16	9th International Nottingham Breast Cancer Conference	Nottingham UK	Nottingham Breast Cancer Conference City Hospital Nottingham, UK Tel: +44 11 596 257 07 Fax: +44 11 596 277 65
25-28	109th Annual Meeting of the American Academy of Otolaryngology – Head and Neck Surgery Foundation	Los Angeles USA	American Otolaryngology – Head and Neck Surgery c/o The AAO-HNS Foundation Inc. 1 Prince Street Alexandria VA 22314-3357 USA Tel: +1 703 836 4444 Fax: +1 703 519 1546 Email: aaomeet@entnet.org

Date	Name of Meeting	Place	Secretariat
29 – Oct 01	10th International Conference on Geriatric Oncology & 6th Meeting of the International Society of Geriatric Oncology (SI OG)	Genolier Switzerland	IMO _ Clinique de Genolier Genolier 1271 Switzerland Tel: +41 22 366 9106 Fax: +41 22 366 9131 Email: siog@genolier.net
October			
02-05	31st European Congress on Cytology	Paris France	MCI France 11, rue de Solferino Paris France Tel: +33 1 53 858252 Fax: +33 1 53 858283 Email: Cytology2005@mci-group.com Web: www.cytologyparis2005.com
09-12	34th Congresso Brasileiro de Radiologia	Brazil	Congresso Brasileiro de Radiologia Av, Paulista 491, 130 Andar Cj. 132-CEP 01311-909 Brazil Tel: +55 11 285 4022 Fax: +55 11 285 4022 Email: cbradiol@cbr.org.br
16-20	ASTRO: 47th Annual Meeting	Denver Colorado USA	American Society for Therapeutic Radiology and Oncology (ASTRO) 12500 Fair Lakes Circle Suite 375 Fairfax Virginia 22033 USA Tel: +1 70 3227 0170 Email: meetings@astro.org
30 – Nov 03	ECCO 13 The European Cancer Conference	Paris France	Federation of European Cancer Societies Avenue E. Mounier 83 Brussels 1200 Belgium Tel: +32 2 775 0205 Fax: +32 2 775 0200 Email: ECCO13@fecsb.be Web: www.fecsb.be
November			
05-09	53rd Annual Scientific Meeting of the American Society of Cytopathology	San Diego USA	American Society of Cytopathology 400 West 9th Street Suite 201 Wilmington DE 19801-1555 USA Tel: +1 302 429 8807 Email: asc@cytopathology.org Web: www.cytopathology.org/meetings/index.php
07-09	CNIO Cancer Conference: Cancer and Aging	Madrid Spain	CNIO – Spanish National Cancer Centre C/ Melchor Fernandez Almagro, 3 Madrid 28029 Spain Tel: +34 91 2246900 Fax: +34 91 2246980 Email: ccc@cnio.es Web: www.cnio.es/ccc
11-13	Oncology Nurses Society Institutes of Learning	Phoenix USA	Oncology Nursing Society 125 Enterprise Drive Pittsburgh Pennsylvania 15275-1214 USA Tel: +1 866 257 4667 Fax: +1 877 369 5497 Email: meetings@ons.org Web: www.ons.org
27 – Dec 02	91st Meeting of the Radiological Society of North America (RSNA)	Chicago USA	Radiological Society of North America (RSNA) 829 Jorie Blvd Oak Brook IL 60523-2251 USA Tel: +1 630 571 7879 Fax: +1 603 571 7837 Email: sdrew@rsna.org
December			
2-6	47th Annual Meeting of the American Society of Hematology	San Diego California USA	American Society of Haematology 1900 M street NW Suite 200 Washington DC 20036 USA Tel: +1 20 2776 0544 Email: meetings@hematology.org Web: www.hematology.org
06-10	28th Annual San Antonio Breast Cancer Symposium	San Antonio USA	San Antonio Breast Cancer Symposium c/o San Antonio Cancer Institute 7979 Wurzbach Rd, Suite U-531 San Antonio Texas 78229 USA Tel: +1 210 616 5912 Fax: +1 210 949 5009 Email: RMarkow@ctrc.net Web: www.sabcs.org
10-14	American Society for Cell Biology (ASCB): 45th Annual Meeting	San Francisco USA	American Society for Cell Biology (ASCB) 8120 Woodmont Avenue Suite 750 Bethesda MD 20814-2755 USA Tel: +1 301 347 9300 Fax: +1 301 347 9310 Email: ascbinfo@ascb.org

THE CANCER COUNCIL AUSTRALIA

The Cancer Council Australia is the peak national cancer control organisation. Its members are the leading state and territory cancer councils, working together to undertake and fund cancer research, prevent and control cancer and provide information and support for people affected by cancer.



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The Cancer Council South Australia
The Cancer Council Tasmania
The Cancer Council Victoria
The Cancer Council Western Australia
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CLINICAL ONCOLOGICAL SOCIETY OF AUSTRALIA INC

The Clinical Oncological Society of Australia (COSA) is a multidisciplinary society for health professionals working in cancer research or the treatment, rehabilitation or palliation of cancer patients.



It conducts an annual scientific meeting, seminars and educational activities related to current cancer issues. COSA is affiliated with The Cancer Council Australia.

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www.cosa.org.au or cosa@cancer.org.au

Membership fees for 2005

Ordinary Members: \$140
Associate Members: \$80
(includes GST)

INTEREST GROUPS

ANZ Children's Haematology and Oncology
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Cancer Research
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Gastrointestinal Oncology
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