

A Clinician's Guide to Integrative Oncology

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What You Should Be Talking About
with Cancer Patients and Why

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Foreword

O'Brien and Sali have done an outstanding job putting together a book which will be useful to anyone who is interested in integrative medicine. The book provides a new and practical approach to integrative medicine practice. Integrative medicine is a relatively new field of medicine. Most health care providers, patients and even academicians are unaware of the importance of this new way of delivering health care. This requires a new way of thinking about health and having a holistic approach to the patient. Integrative medicine is patient-centric, individualised preventive patient care focusing on achieving and maintaining health with sustainable every day interventions and developing healthy habits. The physician's role is to make the patient aware of the factors that result in loss of health and give the patient and his/her family the tools to prevent disease.

This book offers practical advice on conducting a comprehensive integrative medicine consultation. Professor Sali's "Ultimate Consultation" and "Ultimate Patient" ideas are right on target and emphasise the importance of spending time to understand the patient as a whole and putting the patient in the driver's seat in making treatment decisions and living a healthy life to prevent chronic diseases. It is very important to empower the patient and give him/her the necessary tools to make decisions and live a healthy and happy life. The book is well organised with chapters on stress, nutrition, sleep, vitamin D and sunshine, exercise, additional therapies and the last chapter brings it all together. Importance of stress reduction, physical activity, healthy diet, sleep as well as nutritional supplements and botanicals are emphasised. Each chapter provides detailed information and a very good summary of the subject area with plenty of references.

The book is easy to read and full of useful information for professionals and lay people alike. I would highly recommend this book to all health care providers as well as to students in the field of health sciences, and the public in general. Healthy living and disease prevention is essential for a happy and productive life.

By implementing the knowledge and strategies in this book, the whole society could become healthier and more productive. This would also reduce health care expenditure and save governments large amounts of money.

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Preface

The idea for this book came about after I sat in on one of Prof. Avni Sali's patient consultations in 2015. The person had cancer, as many of Prof. Sali's patients do. This is not surprising with the 'one in three women and one in two men will be diagnosed with cancer in their lifetime' figures that are regularly splashed around—a rather bleak outlook for the western world to say the least. As a new member of the National Institute of Integrative Medicine (NIIM) consulting in the NIIM Clinic, the largest integrative medicine clinic in Australia, and a Chinese medicine practitioner, I was keen to understand more about Prof. Sali's approach to cancer management. As the '*Founding Father of Integrative Medicine*' in Australia, surely I could learn something from this fellow? And learn I have.

What struck me first is that Prof. Sali's consultations are typically two to three hours long. The patient is listened to and their story is heard. The atmosphere is relaxed but does not detract from the seriousness of what these people face when confronted with a cancer diagnosis. The patient is not told what to do. Their intelligence is respected. They have come for advice on what they can do. In that two- to three-hour period, Prof. Sali walks the patient and, typically, their support person or persons who accompany them, through the steps that they can take to become 'the Ultimate Patient'. The Ultimate Patient is someone who takes an active role in becoming as healthy as they can. In his consultation, which we have termed 'the Ultimate Consultation', the whole person is considered—how stress, diet, lack of exercise and sunlight exposure plus other lifestyle factors can impact on the body in rather complex ways to create illness, and how such factors, when addressed, can assist the patient in achieving a healthier state of being. The focus is on the person, the human being, not just the disease, its pathogenesis and the cancer cells that need to be stopped from replicating.

Integrative Medicine, which combines conventional medicine with evidence-based complementary medicine, therapies and lifestyle interventions for the treatment and prevention of disease, provides the foundation of Prof. Sali's approach. Integrative Medicine empowers patients and health practitioners with a wider range of treatment, screening and prevention options, is actioned via a collaborative relationship and emphasises the promotion of health and well-being.

At this time in history, patients in the western world are voting with their feet—they are choosing to practise their own form of integrative medicine, even if their orthodox medical doctor isn't. A systematic review of complementary and alternative medicine (CAM) use found that prevalence in countries including the United States, Australia, Great Britain, Germany, Italy, Austria, Switzerland, Canada, South Korea, Denmark and others ranges between 5 and 74.5% [4]. Data from the (then-named) National Centre for Complementary and Alternative Medicine in the US (the name has changed to the National Centre for Complementary and Integrative Health) indicated that approximately 38% of adults and 12% of children use some form of CAM [9], whilst in Australia this figure is almost 70% of the population [16].

Studies indicate that people with cancer are high users of CAM. For example, amongst European countries, the prevalence was approximately 36% (range 14.8–73.1%) [6], and data from the 2007 National Health Interview Survey (NHIS) indicate that 65% of those surveyed who had ever been diagnosed with cancer had used 'complementary health' (CAM) approaches [10]. And of course, it is well known that many patients don't tell their medical doctor about their CAM use, for all sorts of reasons. Often, it is simply fear of disapproval. From our experience as clinicians, there are still too many medical practitioners not supporting their patients' choice to do something pro-active and look at a range of options. This behaviour may simply be due to mainstream doctors' lack of knowledge about evidence-based integrative medicine, but it might also have to do with turf wars in some cases too.

Orthodox medicine is, for the most part, dominated by pharmacological and biochemical medicine. This is also true in oncology, with its focus on surgery, chemotherapy and radiation therapy, also known as 'slash, poison and burn'. Whilst there have been some successes with orthodox approaches in effecting a cure from certain cancers, overall the success rate is not spectacular. For example, the benefit of cytotoxic chemotherapy is called into serious question by studies such as one conducted by Morgan and colleagues: a literature search of clinical trials reporting the 5-year survival benefit attributable to chemotherapy alone in adult malignancies found that the overall contribution of curative and adjuvant cytotoxic chemotherapy was 2.1% in the US and 2.3% in Australia [7].

Orthodox western medicine is, in general, inherently reductionist in its approach. That's not to say that such an approach has not been tremendously valuable in many respects. And it's not to say it isn't changing, for example with the various fields of omics like metabolomics opening up. However, the danger is that in focussing on the cancer cells, we miss what we know are the many other factors, including stress, diet, exercise, and the mind, that all impact on the immune system, the gut microbiome, the endocrine system and other systems. Orthodox oncology focuses on the disease, in particular eradicating the cells that are out of control, with chemotherapy, radiation therapy and surgery. Scant attention has been paid in orthodox oncology to the factors that brought the human being into such a state of imbalance that cancer could begin to manifest in the first place. Little attention is paid to treating the whole person, mind and body, nor to helping the patient with

cancer achieve a healthier general state. A healthy person has a better chance of beating cancer than an unhealthy one. The advent of immune-stimulating drugs has caused a level of confusion amongst oncologists because for the first time, there is a need to think about the whole person, and not just the cancer. This is because immunity is about the person. It's not enough to simply remove the cancer, poison it or radiate it.

As far back as 1931 it was recognised by Nobel Prize winner Otto Warburg that cancer cells have a different energy metabolism compared with healthy cells [3]. He found that cancer cells utilised aerobic fermentation, producing lactate in the presence of oxygen, and believed this was due to respiratory insufficiency [3, 11, 12]. Pederson, Seyfried and others found that cancer cells have abnormalities in the content and composition of their mitochondria, and are severely reduced in number in some cancers [3, 11, 12]. The 'Metabolic Theory of Cancer', developed from Warburg's original discoveries, posits that mitochondrial damage is the primary event in cancer, not genetic mutation, which may occur afterwards [3, 11, 12]. This theory, of course, is unlikely to be popular as it challenges the predominant line of thinking in this field, that is, that cancer is essentially caused by genetic mutations. In more recent times, medical oncologist and prostate cancer survivor, Dr. Charles Myers found evidence that prostate cancer utilises LDL cholesterol as a major source of energy, but if LDL cholesterol is lowered, the cancer cell is able to alter its metabolism to use glucose instead as fuel. These findings obviously present some opportunities for the pharmaceutical industry to manipulate metabolism. There are also many other possible ways in which metabolism might be manipulated, without detrimental side effects, for example with diet, stress reduction and exercise.

The gloves have metaphorically come off years ago in the battle to suppress or discredit various forms of CAM. Ralph Moss's book, 'The Cancer Syndrome' [8] details the 'outlawing' of non-conventional medicines including laetrile, vitamin C, and immune therapy. The Bristol Cancer Help Centre (BCHC) was set up decades ago in the UK, at around the same time as the Gawler Foundation in Australia was established by Dr. Ian Gawler. These were the first major centres to establish support systems for patients with cancer, offering CAM therapies, and they were set up outside conventional cancer organisations. A study was conducted to investigate patient outcomes at the BCHC centre in comparison to those at two specialist hospitals and one district general hospital [1], soon after Spiegel's study in San Francisco that showed that an integrative programme of social support with hypnotherapy almost doubled the survival time of patients with metastatic breast cancer in comparison to routine oncological care [14]. The BCHC study was funded by two major UK cancer charities, the Cancer Research Campaign and the Imperial Cancer Research Fund [2, 13]. The BCHC study, published in the prestigious *Lancet*, found what could only be described as an astounding result that patient outcomes were actually *worse* if they got additional support at the BCHC [1]. However, it transpired that the study was severely flawed in several ways and was widely criticised by medical research experts [15]. For example, some of the criticisms were that the study wasn't randomised and the BCHC included patients who

were much sicker than those who went to the London Hospital at baseline. The researchers eventually admitted that it was much more likely that the differences between the two groups could be explained by the increased severity of disease in the BCHC group [15]. In 1992 a formal complaint against the study was made to the UK Charity Commission by a group of patients who were part of the study, who formed the Bristol Survey Support Group [2, 13]. Some nineteen months later, the UK government's Charity Commission that oversees charities all British charities had completed its investigation and severely reprimanded the two charities that had funded the study for poor supervision [2, 13]. However, by this time much damage had been done to the BCHC and it nearly went into receivership. This underpins the necessity of rigorous research methodology and highlights the damage that can be done when erroneous results reach the press.

Pharmaceuticals equal big money. In contrast, you can't patent complementary medicines easily and you can't bottle meditation. The recent savagery of homoeopathy in Australia is an example of an attempt to discredit the practice, despite its very wide use in European countries, on the basis of, purportedly, a lack of scientific evidence.

For those involved in research, it is well known that it is very difficult to procure government funding for research into other aspects of patient care, because there are often no products to sell that are patentable. Governments have a responsibility to become more informed and fund a broader range of research. Governments also have a responsibility to examine their health funding models. At the level of health systems, doctor reimbursement is biased towards short consultations and selling products (via a prescription pad) rather than selling health.

Despite the dominance of the pharmaceutical industry and various efforts to discredit forms of CAM, governments are starting to recognise the value of Integrative Medicine. For example, the National Center for Complementary and Integrative Health (previously the National Center for Complementary and Alternative Medicine, NCCAM) is part of the National Institutes of Health (NIH) in the United States (US). The US National Cancer Institute's Office of Cancer Complementary and Alternative Medicine (OCCAM) and the Cancer Institute of the Chinese Academy of Chinese Medical Sciences jointly held planning meetings to establish the International Consortium for Chinese Medicine and Cancer in 2014 and 2015, clear recognition of the need to integrate knowledge across medical systems. Orthodox cancer organisations are recognising that cancer sufferers will use different forms of CAM and are providing information on their websites. For example, the American Cancer Society website has a '*Complementary and Alternative Methods and Cancer*' section devoted to information about CAM and provides quite balanced information. The Australian Cancer Council's website provides slightly more conservative information about various alternative therapies. The Clinical Oncology Society of Australia (COSA) is the peak national body representing health professionals from all disciplines who work with cancer patients. COSA has a Position Statement on the use of CAM by cancer patients. This is evidence of some acknowledgement from orthodox structures of a role of CAM in supporting cancer patients.

Education of doctors in Integrative Medicine is becoming more formalised. Integrative Medicine is now a Board-certified clinical speciality of western medicine in the US, indicative of the recognition of its value. It is likely that other western countries will follow suit in the not too distant future. One of Australia's more prestigious universities, the University of Sydney, announced a position of Chair of Integrative Medicine in May 2015.

In western countries like Australia and the US, we tend to look at things from our own western-centric perspectives. However, certain forms of CAM are not 'alternative' in their countries of origin. Chinese medicine is not 'alternative' in China, where Chinese herbal medicine is combined with chemotherapy and radiation therapy treatment of cancer and is also used post-treatment and in palliative care. The concept of cancer is not new to China. In ancient China, the word for 'tumor' was found on 3500-year old oracle bone prescriptions. The *Central Treasury Canon* from the Han Dynasty already recognised that cancer stemmed from endogenous causes and that tumors were a partial consequence of systemic disease [5]. The Chinese medical system differs from the biomedical model in several ways, including importantly an understanding that the various internal organ systems are interdependent, and that ultimately it is a loss of 'balance' internally that leads to ill health. It is inherently holistic in its approach; emotional factors are seen as potential aetiological factors and it does not suffer from the Cartesian split between mind and body. Chinese medicine is but one different medical system. Ayurveda, Tibetan and other traditional medicines all have their own knowledge and models of the human being.

In order to achieve the best outcomes for cancer patients, a more balanced approach is needed: one in which the best of all types of medicines and therapies are considered, and a team approach to assisting the patient is taken. This is an integrated care model. Integrative Medicine is open to all possibilities that the patient may present with. It is not biased toward one particular treatment regime. This is in contrast to conventional oncology which does have a heavy bias towards surgery, radiation therapy, chemotherapy, and other drugs.

This book is not a guide to the various and many orthodox cancer treatments; other books are available for that purpose. This book is a practical guide for clinicians focussed on how to conduct a good integrative medicine consultation, which we have termed 'the Ultimate Consultation'. The Ultimate Consultation starts with the premise that it is the whole person who needs to be considered, not just the disease, and that to achieve the best outcomes (the Ultimate Result), we need the Ultimate Patient. The Integrative Medicine approach, one that takes into account the myriad of factors that have often led to suboptimal health and empowers the patient with a range of strategies that they can employ, provides the foundation for the Ultimate Consultation.

This book is written for medical doctors, in particular oncologists, and CAM and allied health practitioners who have their part to play in assisting patients with cancer, as well as students of these varied health disciplines. It is written for those who wish to provide a more comprehensive consultation that may complement orthodox cancer treatment and importantly empower their patients to be pro-active in their own journey with cancer.

This book is written on the basis of Prof. Avni Sali's practise, as a joint collaboration between the authors. I am indebted to Prof. Sali for sharing his knowledge with us.

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His lifelong work has been the tireless promotion of bringing evidence-based Integrative Medicine into the mainstream medical model to become the medical paradigm of health care.