Complementary and alternative medicines for cancer patients

13th April @ 5.00-6.30pm

Professor Andrew McLachlan, Michael Dash, Gwenda Bate, Jessica Zhang, Alan Lem

Venue:
Concord Hospital
Medical Education Centre
Lecture Theatre 1
Ground Floor
(entrance off Hospital Rd through Gate 3)

Light refreshments will be served from 4.30 pm
Presentations made by
Andrew McLachlan
Professor Pharmacy, Concord Hospital,
Michael Dash
Coordinator, Sydney Local Health District Bereavement Counselling Service
Jessica Zhang
Founder, Relaxation Yoga
Eun Jin Lim
PhD Candidate, Concord Clinical School
Alan Lem
PhD, RMT, Music and Health Consultant
at the April 2015 Public Forum
of the Sydney Survivorship Centre.
Understanding interactions with complementary medicines

13\textsuperscript{th} April 2015

Andrew McLachlan
Professor of Pharmacy (Aged Care)

Centre for Education and Research on Ageing, Concord RG Hospital

Faculty of Pharmacy
University of Sydney
This talk

• Use of complementary and alternative medicines in Australia
• Understanding the evidence
• Herbal medicine quality
• Advice on where to get information
QUALITY USE OF MEDICINES

- Quality Use of Medicines is defined as:
  - selecting management options wisely;
  - choosing suitable medicines if a medicine is considered necessary; and
  - using medicines safely and effectively.

“Better health through quality use of medicines”
Complementary medicines
YOU'RE LOOKING BLOODY MARVELLOUS CONSIDERING THE DRUG TREATMENT!

EXCELLENT HAIRCUT, TOO...

...AND THE COLOUR OF THAT SHIRT REALLY SETS OFF YOUR EYES!

COMPLIMENTARY THERAPY
Complementary medicine

Complementary medicines
Complementary medicines

Alternative medicines
## Trends in complementary medicines use

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<tbody>
<tr>
<td>Vitamins*</td>
<td>38 %</td>
<td>36 %</td>
<td>39 %</td>
<td>46%</td>
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<tr>
<td>Herbal medicines</td>
<td>10 %</td>
<td>13 %</td>
<td>21 %</td>
<td>16%</td>
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<tr>
<td>Mineral supplements</td>
<td>9 %</td>
<td>11%</td>
<td>14 %</td>
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<td>Soy products</td>
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<td>4 %</td>
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<tr>
<td>Chinese medicines</td>
<td>2 %</td>
<td>3 %</td>
<td>2 %</td>
<td>7%</td>
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<tr>
<td>Homeopathic medicines</td>
<td>4 %</td>
<td>4 %</td>
<td>2 %</td>
<td>6%</td>
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<tr>
<td>Overall CAM use</td>
<td>49 %</td>
<td>52 %</td>
<td>52 %</td>
<td>70%</td>
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*excluding calcium and iron

data shown as percent respondents who have used these medicines within the last 12 months.


The issue

- 50% of people who reported that they used complementary and alternative therapies also used conventional medicines on the same day.

- 57% did not report the use of complementary therapies to their doctor.

CAM use in People with Cancer in Australia

- 65% of cancer patients used at least one form of CAM
- Taking CAM before, during and after chemotherapy.
- 90% believed that CAM provided potential health benefits
- less than 3% reported adverse effects

CAM use in People with Cancer in Australia

- 80% believed CAM can provide health benefits even when efficacy has not been proven.
- Most patients (90%) believed that doctors should consider learning about CAM to provide appropriate advice to their cancer patients.
- 83% indicated they would be happier to accept CAM if it was offered by the hospital.

N = 381

Herbal medicines* in common use

1. Aloe vera
2. Garlic
3. Green tea
4. Chamomile
5. Echinacea
6. Ginger
7. Cranberry
8. Peppermint
9. Ginseng
10. Ginkgo biloba
11. Evening primrose
12. Dandelion
13. Valerian
14. Liquorice
15. St. John’s wort (*Hypericum*)
16. Slippery elm
17. Milk thistle
18. Dong quai
19. Black cohosh
20. Bilberry
21. Senna
22. Hawthorn
23. Saw palmetto
24. Chasteberry (vitex)

* in rank order

A population survey on the use of 24 common medicinal herbs in Australia.
Zhang AL, Story DF, Lin V, Vitetta L, Xue CC.

N = 2526, Victoria, Australia
Herbal medicines* where care is needed

1. Aloe vera
2. Garlic
3. Green tea
4. Chamomile
5. Echinacea
6. Ginger
7. Cranberry
8. Peppermint
9. Ginseng
10. Ginkgo biloba
11. Evening primrose
12. Dandelion
13. Valerian
14. Liquorice
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A population survey on the use of 24 common medicinal herbs in Australia.
Zhang AL, Story DF, Lin V, Vitetta L, Xue CC.
“Show me a drug with no side effects and I’ll show you a drug with no actions”

Sir Derrick Dunlop
Chairman, Committee on Safety of Drugs,
UK founder of the Yellow Card System 1964
“All substances are poisons; there is none which is not a poison. **The right dose** differentiates a poison from a remedy”

**Phillipus Aureolus Theophrastus Bombastas Von Hohenheim**

Paracelsus (16th Century)

....using medicines safely and effectively
Key issues

Complementary medicines
- are complex mixtures of phytochemicals
- may vary between and within products
- are commonly used with conventional medicines
- can significantly impact on concomitant therapy
- are supported by evidence of variable quality

Understanding the nature of the evidence and mechanism of interactions can guide their safe management
Significance of drug-herb interactions

- Increased risk of unwanted effects of drug or complementary medicine
- Decreased clinical effects of a conventional medicine
- Not all combinations are good (or bad!)
- Lack of evidence to guide consumers
Therapies using herbs

Herbal medicines use various parts of the plant that cause chemical changes in the body when consumed or applied to the skin to treat disease and promote health. Therapies using herbs can also be called biological therapies or botanical medicine.

- Western herbal medicine
- Chinese herbal medicine

Benefits: Many scientific studies have examined the effects of various herbs for people with cancer. Some remedies have been proven to reduce side effects from cancer, as well as helping with cancer prevention. Other remedies don’t have scientific backing, but historical usage suggests they may help with wound care, skin conditions, the immune system, digestive function and energy levels.

Side effects: Many different types of herbs are available, which may be used alone or in combination. Some may cause unwanted side effects.

Memorial Sloan Kettering Cancer Centre

Tips for using herbs during cancer treatment
Tips for using herbs during cancer treatment

• Use quality products (qualified practitioners or reputable suppliers)

• Ask for products that are clearly labelled
  – batch number, date, quantity, dosage, directions, safety information if applicable, practitioner’s contact details.

• Avoid self-prescribing with over-the-counter products from a health food shop, pharmacy or the internet.

• Products sold over the internet may not subject to the same regulations as those sold in Australia.

• Make sure you know how to take your herbs.

• Let your doctor know.

Integrative Medicine

Our integrative medicine services complement mainstream cancer care. We offer touch therapy, mind-body therapy, acupuncture, creative therapy, and nutrition counseling, as well as exercise programs to improve strength and promote relaxation. Our services are available to anyone receiving cancer care, whether at Memorial Sloan Kettering or elsewhere, and to the general public as a whole.

In this section
- Our Expertise
- Therapies, Classes & Workshops
- About Herbs, Botanicals & Other Products
- For Older Patients
- Our Research
- Additional Resources
- Multimedia

Soothing Treatments

Touch therapies such as reflexology and shiatsu can often ease common symptoms of cancer treatment, including pain, anxiety, and fatigue.

On Our Blog
- Dance Heals: Dréa’s Dream
- Can People with Breast Cancer Benefit from Complementary Medicine?
- Recognizing and Managing Cancer-Related Fatigue

Related Media Coverage
About Herbs, Botanicals & Other Products

This information resource, presented by our Integrative Medicine Service, provides evidence-based information about herbs, botanicals, supplements, and more.

Frequently Asked Questions
Find out which botanical products may pose a health risk; which supplements might cause dangerous interactions; and more.

About this Resource
Objective information for oncologists, healthcare professionals, and consumers

Our Herbal Policy
Healthcare providers should always inquire about and document the use of complementary therapies with all patients
BU ZHONG YI QI TANG

- *Ginseng and Astragalus* formula

- 脾胃論 Pi Wei Lun (Theory of Spleen and Stomach)

- Dong-Hen, Li (1180-1251)
BU ZHONG YI QI TANG

Each 400 mg tablet contains Chinese herbal extracts equivalent to the dry herb ingredients:

- *Astragalus membranaceus* 200.0 mg
- *Panax ginseng* (Ginseng) 133.3 mg
- *Atractylodis macrocephala* 66.7 mg
- *Angelica sinensis* (Angelica) 66.7 mg
- *Citrus reticulata* 66.7 mg
- *Bupleurum falcatum* 33.3 mg
- *Cimicifuga heracleifolia* 33.3 mg
- *Zingiber officinale* (Ginger) 100.0 mg
- *Zizyphus jujuba* (Chinese dates) 66.7 mg
- *Glycyrrhiza uralensis* (Licorice) 133.3 mg
BU ZHONG YI QI TANG

• Recent clinical trials showed that BZYQT is effective for allergic rhinitis, dermatitis, weakness in elder people, fatigue and surgical stress caused by cancer treatment.

• 17 clinical trials published in Chinese in last 5 years related to improvement of side effects caused by cancer treatment.

• Little is known about the herb-drug interaction caused by BZYQT

In summary…..

- Complementary medicine use is increasing
- Keep a list (share your list) – name, dose
- Understand the possible harmful effects
- Herb-drug interactions
  - Can reduce the effectiveness of treatment
  - Evidence of quality
  - Quality of evidence
- Ask your pharmacist or doctor
Acknowledgements

Professor Stephen Clarke

Herb Drug Interaction studies

NHMRC Project Grant
Michael Dolton
Xuemin Jiang
Hongmei Xu
Mohi Iqbal Mohammed Abdul
Kenneth Williams
Richard Day
Basil Roufogalis
Winston S Liauw

Herb Drug Interactions in Cancer

Janette Vardy
Haryana Dhillon
Stephen J Clarke
Inger Olesen
Anne Warby
Ann Sullivan
A Hamilton
Philip Beale
Anneliese Rittau

IMgateway – Interactions Database

www.imgateway.net
"Hi! I'm Herb."
Challenges with evidence related to herb-drug interactions

- Many published studies lack rigorous design
- May not reflect how complementary medicines are used in practice
- Not conducted in the people of interest
- Product quality and variability is a key concern
- Lack of surveillance on use (esp in combination)
I keep forgetting to take my Ginkgo Biloba.
Ginkgo biloba

- Conflicting evidence of impact on slowing cognitive deterioration in older people

- Systematic review based on 9 randomised double blind placebo controlled trials


Mindfulness
Presentation by
Michael Dash
Mindfulness – old into new

Ajahn Amaro & Jon Kabat-Zinn Rome 2013
Mindfulness Based Stress Reduction – MBSR

• Developed and implemented at the University of Massachusetts Medical Center

• Drawn from Buddhist meditation

• Program outline - Full Catastrophe Living
Practices

**Breath**: moment-to-moment awareness of the naturally occurring in and out breath

**Body scan**: focus on the sensations throughout the body with an attitude of allowing and accepting.

**Eating meditation**: focused attention eating through attention to smelling, feeling, hearing and tasting and touching

**Mindful yoga**: yoga postures done mindfully with an emphasis on movement rather than achieving a particular posture

**Visualization**: generating mental images such as mountains or sky to help ground attention and open to the present

**Walking meditation**: intentionally focusing to the experience and sensations of walking

Kabat-Zinn J. *Full Catastrophe Living*
Mindfulness Interventions

Medical

• Asthma
• Cancer (breast, prostate)
• Transplants (solid organ, bone marrow)
• Pain (chronic, fibromyalgia, rheumatoid arthritis)
• Cardiovascular (hypertension, myocardial ischemia)
• HIV
• Diabetes (types 1 and 2)
• Obesity
• Irritable bowel syndrome, lupus
• Immune response to human papillomavirus
• COPD
• Hot flashes

Psychological

• Anxiety disorders
• Depression
• Suicidality
• Personality disorders
• Eating disorders
• Drug abuse and dependence
• PTSD
• Schizophrenia
• Delusional disorder

(McCown & Reibel, 2009)
Mindfulness vs Mindlessness

We are never at home to ourselves, but always beyond ourselves: fear, desire, hope, impel us towards the future.

Michel de Montaigne C16th

and away from the past...
Mindfulness - definitions

– "Paying attention in a particular way: on purpose, in the present moment, and non-judgmentally." (Kabat-Zinn)

– "Awareness of present experience with acceptance." (Germer, Segal, Fulton)
What’s wrong with mindlessness?
Mindfulness – avoidance

Why doesn’t repression of thoughts, emotions, memories work?
Mindfulness – avoidance

...research shows that higher experiential avoidance is associated with...

anxiety disorders, depression, poorer work performance, higher levels of substance abuse, lower quality of life, high risk sexual behaviour, borderline personality disorder, greater severity of PTSD, etc.

Harris, R. Psychotherapy in Australia• Vol 12. No 6. 2006
Mindfulness – enmeshment

What’s wrong with daydreaming & planning?
Mindfulness – avoidance & enmeshment

Relationships with quality of life and disability in chronic, non-malignant pain

“participants who had higher scores on measures of catastrophising, enmeshment, and experiential avoidance were more likely to report their health as worse than one year ago”

Integration of the avoidance cycle with the schema enmeshment model of pain: Relationships with quality of life and disability in chronic, non-malignant pain

Meyer, J. 2009
Mindlessness - autopilot

A new study confirms that just under half the time, 46.9%, people are not focused on the outside world or the task at hand, they are looking into their own thoughts, or “mind wandering”.

The study of 2,250 people proposes most of this activity does not lead to us feeling any happier.

Gilbert & Killingsworth
Mindfulness

“let it flow, just allow the thoughts to come and go”

research respondent quote: The Impact of viewing the body in sudden and unexpected death in Dr. Jane Mowll
Mindfulness - practice

*psssst*…
Don’t try to relax!
Enhance wellbeing through Yoga for cancer survivors

By Jessica Zhang
Founder of Relaxation Yoga
April 2015
Yoga is not about being bendy
Yoga Is Not

• Yoga is not a religion, though for some it is a way of life

• You don’t have to be flexible to practice yoga

• Yoga is not competition, comparison, or jealousy
Yoga is a whole body Philosophy

Breathing exercises

Stretching exercises

postures

Meditation

Mind

Harmony

Body

Spirit
What Yoga Is

• For everyone, regardless of your age or fitness levels

• Yoga (Hatha based) – considered a gentle, low intensity exercise

• Yoga adds contemplative element to exercise, like ‘Mindfulness in motion’
Yoga & Cancer

• Yoga is one of the most widely used complementary therapies today

• There is no scientific evidence to prove that yoga can cure or prevent any type of cancer

• Evidence-based review of yoga as a complementary intervention for patients with cancer, found significant improvements in:
  
  • Sleep measures
  • Quality of life
  • Perceived stress and anxiety
  • Mood
  • Energy levels
Prostate Cancer Survivors & Yoga

Scale Ratings
PC Survivors

Thermometer Scale Rating

Stress
Fatigue
Mood

Before Class
After Class

P < 0.001
P < 0.001
P = 0.004

3.6 ± 2.2
1.7 ± 1.4
3.7 ± 1.7
2.9 ± 1.3
6.0 ± 1.9
7.1 ± 2.1
Yoga helping women from breast cancer surgery

- ABC News on 5\textsuperscript{th} Dec 2014
- University of Tasmania Study

- The study found yoga can help breast cancer survivors suffering from a post-surgical condition called lymphoedema
- Women who took part in the study said the practice had helped in their healing process both \textit{physically and emotionally} and, for some, even changed their lives
Yoga Benefits

- All natural
- Increase lung capacity (more oxygen into body)
- Improve blood circulation
- Energy booster
- Strengthening muscles; improve flexibility
- Stress reliever (restore balance in the nerve system)
Qigong and Cancer
A type of Complementary and Alternative Medicine (CAM)

Eun Jin Lim
PhD Candidate
Concord Clinical School
University of Sydney
What is *Qigong*?

### Mind-Body *Qigong* therapy

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<tr>
<th>Term</th>
<th><em>Jing</em></th>
<th><em>Qi</em></th>
<th><em>Shen</em></th>
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<tbody>
<tr>
<td>Meaning</td>
<td>Fundamental body essence</td>
<td>Energy</td>
<td>Spirit</td>
</tr>
<tr>
<td>Purpose</td>
<td>Physical health</td>
<td>Psychological health</td>
<td>Spiritual health</td>
</tr>
<tr>
<td>Technique</td>
<td>Movements</td>
<td>Breathing</td>
<td>Meditation</td>
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Maximize natural body healing

Therapeutic effect
What is *Qigong*?

- 5000 year history
- Philosophy of traditional medicine
- *Yin/Yang* and Five elements
- “Theory of the Unity of Nature and Man”
- Holistic medicine
Theory of Qigong

• What is Qi?
  - Nutritional essence Qi (ChongQi), Moving blood Qi (YeongQi),
  - Pre-natal and Post natal Qi (JingQi), Moving body fluids Qi (WeiQi)

• What are meridians?
  - Pathways for energy circulation to spread nutrition/essence, Qi
  - Door to protect from external pathogens (Wind/Cold/Damp/Heat/Phlegm)

• How these are related to Qigong?
  - Qigong is to strengthen JingQi
  - JingQi is battery of our body
Cancer in traditional medicine

Cancer → imbalance within organs and disorders of Qi, blood and body fluids

- invasion of external pathogens
- dramatic or chronic emotional changes or stress
- improper diet
- deficiency and depletion of organs, genetic deficiency

- obstruct Qi, blood, fluid circulation
- Qi imbalance
- nutritional imbalance
- Qi and blood deficiency
- disharmony of Qi and blood dynamics
- imbalance of organs’ function

Qi stagnation, blood stasis and accumulation of Damp-phlegm
Qigong and Cancer

- Qigong is important for cancer patients because....

- Weakness in Qi /blood and Chemo drugs →
  - damage the fundamental Qi (JingQi)
  - disrupts normal Qi flow
  - Complex in symptoms
Qigong and Cancer

Cause
- Weak Qi and blood
- Chemo drugs

Manifestation
- Disrupt Qi flow
- Damage JingQi
- Complex in symptoms

Mind-body Intervention
- Facilitate normal Qi flow
- Replenish JingQi
- Cultivate internal energy and Soothe symptoms
Evidence for *Qigong* effectiveness

- Physical distress
- Quality of Life
- Immunity
- Psychological distress

“I ran all of your symptoms through the computer and now the computer is sick too.”
Physical distress

Mean score change in side effects of the intervention group (Medical Qigong) and the control group. Negative change reflects improvement in side effects, positive change reflects worsening of side effects.

Quality of Life

Mean score change in QOL of the intervention group (Medical Qigong) and the control group. Positive change reflects improvement in QOL, negative change reflects deterioration.

Immunity

The trend of WBCs (in microliters) across 4 times.

Psychological distress

Value of *Qigong* for people after cancer

- Multi-dimensional effect of managing *Qi* cycles
- Need of holistic approach (*Jing-Qi-Shen*) for cancer patients
Qigong exercise

- Breathing
  3 Sec inhale
  4 Sec exhale
  Breath through abdomen

- Hole this gesture for 10 min
- Stay on the spot for 2 min

- Stillness in motion
- Meditate through breathing
• Stillness in breathing makes our mind stabilized. (sūn sī miāo, 561-682. physician and philosopher)

• Stabilizing breathing replenishes Qi to be circulated, becomes a fundamental source of promoting health and treating disease. (zhuxi, 1130-1200. philosopher)

• Qigong is the art and science of refining and cultivating internal energy. (Ken Cohen)
Thank you
Music and Wellbeing
Concord Survivorship Centre

Dr Alan Lem, RMT
Music and Health Consultant

alanlem@hotmail.com
Ph: 0434438889
Music and Wellbeing
Concord Survivorship Centre

Music can be soothing and stimulating,
inspiring and comforting,
unifying and communicative.

It offers shared experiences and a means of self-expression.

It can also facilitate new insights into one’s mind and body.
Music had significantly beneficial effects on anxiety, pain, mood and the quality of life.

Music may reduce heart rate, respiratory rate, and blood pressure.

No evidence of effect was found for depression, fatigue, and physical status.

**Music interventions may be offered as a complementary treatment to people with cancer.**
A series of music listening sessions can assist the patients to become skilled in using music for relaxation purposes.

A series of active music therapy allows for the deepening of the therapeutic process through the music, which could lead to health benefits.

32 randomised trials involving 3181 people diagnosed with cancer:

- Music had positive effects on coping anxiety assessed respectively by (a) Self-Rating Anxiety Scale, (b) Hamilton Anxiety Scale, and (c) Spielberger State-Trait Anxiety Inventory
- 7 studies: music improved the symptoms of depression (moderate-quality)
- 7 studies: music had positive effects on pain-management (moderate-quality)

- 4 studies: music lowered heart rate (moderate-quality)
- 3 studies: music could reduce respiratory rate (low-quality)
- 2 studies: music improved quality of life (moderate-quality)

**Music interventions are accepted by patients and associated with improved psychological outcomes.**
Health Professional Perspective


“What do you think are the main benefits of music therapy to people with cancer?”
Health Professional Perspective


- Music as background
- Entertainment and enjoyment
- Music as a tool in communication
- Music as a tool in healing
Music and Wellbeing at Concord Survivorship Centre

OBJECTIVES:

- Supportive care to add anti-cancer treatments
- Addresses many important psychosocial needs, such as relaxation and group support
- Promotes non-invasive strategies to ameliorate the effects of treatments by strengthening sensory awareness and offering psychological support
Music and Wellbeing at Concord Survivorship Centre

SESSION FORMAT:

- Listening to music in a group setting
- Singing and playing simple musical instruments
- No music skills or previous experience are necessary
Music and Wellbeing at Concord Survivorship Centre

OUTCOMES (PILOT):

- Instrumental techniques – helping motor control and sensory awareness
- Musical response (e.g. imitation or playing in the same tempo) – helping communication
- Listening between the sounds – helping mindfulness
- Singing both individually and as a group – helping breathing
SLIDE 2:

A diagnosis of serious illness can result in an equally serious challenge to personal identity. This can be fully understood only if one considers both the physiological and psychological resources of the individual. This is also why music has such a broad appeal; it can be soothing and stimulating, inspiring and comforting, unifying and communicative. It provides shared experiences and a means of self-expression. With proper guidance, music can also help a person to gain a new, healthy insight into the mind and the body.

SLIDE 3:

In 2011, a review of 30 clinical trials involving music interventions with 1891 people diagnosed with cancer was conducted for the Cochrane Library. According to the results, music interventions had significantly beneficial effects on anxiety, pain, mood and quality of life in people who have cancer. The review also suggested that music may reduce heart rate, respiratory rate, and blood pressure, though this reduction was small and therefore may not be clinically significant. No evidence of effect was found for depression, fatigue, and physical status. The authors of the review concluded that music interventions may be offered as a complementary treatment to people with cancer.
In the final remarks the authors of the review commented that music listening sessions may help the patients to become skilled in using music for their own relaxation purposes. They also suggested that multiple sessions of active music therapy deepen the therapeutic process, which may lead to individual health benefits.

Results of another meta-analysis, involving 32 randomised trials and 3181 participants showed that music had positive effects on coping anxiety assessed by the above listed anxiety inventories. Seven studies demonstrated that music improves the symptoms of depression while another seven observed that music had positive effects on pain management.

Four studies indicated that music lowered heart rate. Three suggested that music could reduce respiratory rate. Two indicated that music improved quality of life. Overall, the review suggested that music interventions are accepted by patients and are associated with improved psychological outcomes.

In a much earlier study, looking at the opinion of health professionals and carers, the question was: “What do you think are the main benefits of music therapy to people with cancer?”
The study identified three areas of interest:

**Music as Background:** Here the comments were that background music improves the general environment, emphasising relaxation and a calming atmosphere that it provides.

**Entertainment and Enjoyment:** Most respondents talked about the benefits of music without linking it to healing or therapeutic process. Some, however, mentioned musical enjoyment in direct relation to illness, stressing the value of the joyful qualities of music when other opportunities for expression are limited. Some respondents talked about the potential of music to compensate the losses associated with cancer.

**Music as a tool in communication and healing:** The respondents talked about music enhancing communication between professionals, patients and their families. With respect to healing, they saw music as being supportive, even essential, but not necessarily central. Practitioners of visualisation, meditation, massage and other therapies talked about the power of music to calm the mind, stopping invasive thoughts and providing a medium for expressing emotions which otherwise may be kept hidden.

**SLIDE 9**

While traditional music interventions in cancer care have usually been hospital based, as treatments become more effective and life expectancy increases, there is a trend towards shorter hospital stays and a corresponding need for community-based facilities. This is reflected in a new, increasingly growing model of care, which adds supportive approaches to the traditional treatment model. Research also shows that many patients seek ways to ameliorate the effects of treatments and gain psychological support in order to feel more “in control” of their situation. Music interventions are particularly well suited to addressing the psychosocial needs of these patients.
The program offers a range of musical experiences with the focus on listening to music, and creating music by singing and playing simple instruments. The music is generally improvised and involves playing simple rhythms and melodies in the way that offers a rich and fulfilling experience both for the individual and the group as a whole. To participate, no previous experience or music skills are necessary.

During the pilot program participants have learnt specific ways of playing musical instruments, including rhythmic and non-rhythmic playing, changing the tempo and colour of the sound, using different techniques (like playing with fingers on the drum). They have also learnt to respond musically to one another in the manners of question-response, rhythmic imitation, and playing together in the same tempo and with the same dynamics.

The pilot has also shown that musical activity can help participants to learn about silence, as silence is always present between the musical sounds. It is believed that the awareness of that may help some people with their practice of mindfulness.

Finally, all the participants were encouraged to sing, both individually and as a group. This was seen by the participants not only as an effective means of self expression but a useful breathing exercise.

Preliminary evaluation indicates that the most successful experiences were (1) singing and (2) particular musical instructions where musical activity was used to address specific physical and psychological faculties, for example movement coordination, levels of arousal, sensory awareness and mindfulness. These will be offered in the next round of the program.

A quotation from one of the participants: “As you adjust to living with cancer, you might to be inclined to do other programs to benefit your health (nutrition, weight management lectures, resistance training, yoga etc). Music and Wellbeing however addresses an art form opportunity you may have missed when you were a child. Alan's patience and experience can tease out of you an interest, a talent, you may have thought you lacked, regarding music and reignite an interest/passion that you thought had passed you by. No experience necessary, only the willingness to give it a try. Conducted with supportive friendly people. What have you got to lose?”