ISSUE 6 | DECEMBER 2012

SPNZ SPORTS PHYSIOTHERAPY NEW ZEALAND BULLETIN

FEATURE TOPIC: Physical Activity, Exercise and Sport

LINKS

Sports Physiotherapy NZ
List of Open Access Journals
Asics Apparel and order form
McGraw-Hill Books and order form
Asics Education Fund information
IFSPT
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Welcome to the December 2012 Edition of the SPNZ Bulletin.

This is the last edition for 2012, capping off a busy and productive year for SPNZ. Our executive have been working extremely hard and this year we have achieved many goals. Many members may be unaware of the work the Executive put in behind the scenes and I would like to thank them sincerely on your behalf for their dedication, time and effort that they put into SPNZ. There are also now a large group of people contributing to the SPNZ Bulletin, and thanks to Aveny Moore, Stephanie Ashton, the Special Projects Group and all the Feature article contributors to the SPNZ Bulletin in 2012. Thanks also to Asics and Formthotics for their ongoing support and sponsorship.

There are too many people to thank in one Bulletin, but rest assured all your contributions are much appreciated and we look forward to another productive year in 2013 that will include the roll-out of our Education Courses and dissemination of the Sports Physiotherapy Code of Ethics and Professional Conduct. We wish all members and your families a very safe (physically active!!) and Merry Christmas and Happy New Year.

Physical Activity

In this edition we present a timely feature on Physical Activity. Recently the government have highlighted the exponential growth in

INSIDE THIS EDITION:

inactivity related illnesses. Experts are predicting that 50% of New Zealanders will have pre-diabetes or diagnosed Type II diabetes by the time they are 50 years of age. In this edition, Sophie Vabulis (Physical Activity Manager for Sport Canterbury, and Green Prescription Area Manager for Canterbury/West Coast) talks about "Green Prescriptions" as a tool for increasing physical activity levels for patients as part of an overall health management plan. Sophie discusses eligibility criteria, referral pathways and the structure of the Green Prescription programme, as well as providing a wealth of resources for patients on getting active, staying active, and contact details for physiotherapists wanting to find out more information. We have also added a "Stages of Change" attachment to this Bulletin to help health professionals assess whether patients are ready to change their 'activity behaviour'.

Physical Activity in Adults and in Special Populations

This feature is complemented by an Editorial that covers definitions of Physical Activity, Exercise and Sport, a review of the SPARC "Guidelines for Promotion of Physical Activity for Adults", and the SPNZ Research Review team who have provided Physical Activity Guidelines for the elderly, in pregnancy, for diabetics and children. We will be adding these resources to the "Health Advice" section of the SPNZ website for members of the public to access, so feel free to pass on our website link to your patients.

SPNZ Education Course: "Promotion and Prescription of Physical Activity and Exercise"

In 2013, SPNZ will be running several courses, one that covers "Promotion and Prescription of Physical Activity and Exercise" in which the benefits, assessment and prescription of Physical Activity will be addressed. More information will be distributed as details become available.

Also in this Edition:

- Asics commentary on Lightweight Running Shoes
- Fijian National Sports Science Conference Report by Kate Polson
- Announcement of the 2012 Student Research Awards from the University of Otago and AUT University
- Latest Research Reviews
- International Conference Calendar
- Classifed advertisements.

Thanks to all our members for their ongoing support during 2012 and we look forward to seeing you all again in 2013.

Merry Christmas and Happy New Year

from all of us at SPNZ.

IN THIS EDITION

To locate a page quickly, click on the 'pages' symbol at the top of the pdf reading panel at left of screen

Physical Activity, Exercise and Sport

By Dr Angela Cadogan

There is much talk about "physical activity" in the medical world at present, with good reason. The results of physical inactivity are now well known and include adverse psychological, physical, physiological, health and quality of life consequences. Physical inactivity is emerging as one of the global "Population Health" priorities of this millennium, and its 'antidote', "physical activity", has well documented benefits including the prevention of chronic health conditions such as Type II diabetes, cardiovascular disease and high blood pressure.

But what constitutes "physical activity" and how does it differ from "exercise" and "sport"? What is "population health" and what part do physiotherapists, and in particular 'sports physiotherapists' play in this emerging area of healthcare? We will explore these issues in this editorial.

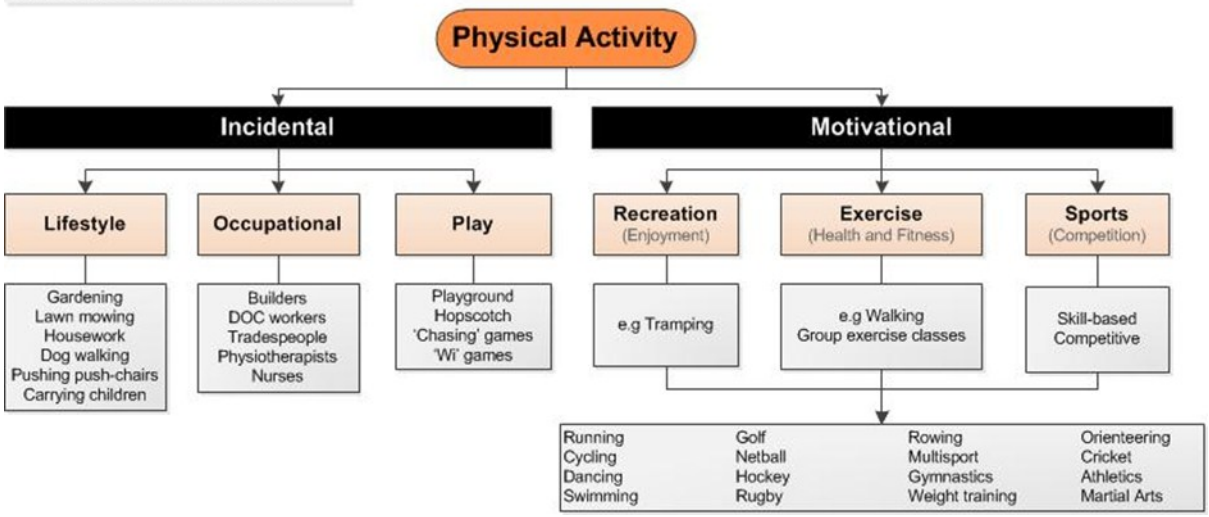
What is Physical Activity?

Physical activity is defined as:
"*Any bodily movement produced by skeletal muscles that results in energy expenditure*"[1] (p. 126). Physical activity is further defined by its' frequency, intensity, duration and type of activity.

Types of Physical Activity

There are many forms of physical activity. Physical activity can occur 'incidentally' as a result of lifestyle influences, occupational tasks, activities and children's 'play' or can reflect motivational influences including recreation (enjoyment), exercise (health benefits) or sport (competitive, skill-based activity). In this way, physical activity can be broadly categorised as "incidental" or "motivational" (Figure 1).

Figure 1. *Types of Physical Activity*



How Does Physical Activity Differ From Exercise and Sport?

Physical activity suggests a wide variety of activities that promote health and well-being. Both exercise and sport are forms of physical activity with different motivational goals.

Exercise is defined as: "*Physical activities that are planned, structured, repetitive and purposive that aim to maintain or improve one or more of the components of health or physical fitness*".[1]

Sport is defined as: "*activity requiring physical exertion and/or physical skill, which, by its nature and organisation, is competitive*".

Physical Activity, Exercise and Sport

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Therefore, the key differences between exercise and sport are:

- Exercise is physical activity that is often associated with fitness maintenance or improvement only.
- Sport is competitive and skill-based physical activity that requires the execution of specific motor skills to a high level of precision that is not required for 'health-related exercise'.

What is "Population Health"?

Population health refers to consideration of the health outcomes or status of defined populations and the distribution of such outcomes within these populations. Physical inactivity is now recognised as a global population health priority.

What Role Does Physiotherapy Play in "Population Health"?

A "population health approach" refers to explicitly taking account of all the influences on health (the determinants of health) and how they can be tackled to reduce inequalities and improve the overall health of the population.

In terms of the 'inactive' population, physiotherapists play a vital role in the promotion of the health benefits of physical activity. More than any other profession, physiotherapists can help to prevent chronic disease by promoting the benefits of physical activity and encouraging those at risk to become more active. The "sit less, move more" campaign promoted by Physiotherapy New Zealand in the 2012 World Physiotherapy Day sums it up, and all physiotherapists should encourage people to increase their level of physical activity at every opportunity. Physiotherapy New Zealand provided a list of "**10 Tips for Sitting Less**" relating to daily lifestyle 'habits'. Combined with other influences on health such as nutrition, genetic risk factors and smoking, physiotherapists play a vital role in the multidisciplinary "population health approach" to physical inactivity.

What Role Do Sports Physiotherapists Play in "Population Health"?

While all medical professionals, including physiotherapists are duty-bound to promote and encourage physical activity, "sports physiotherapy" is specifically concerned with the promotion of **safe participation** in physical activity. Sports physiotherapists should therefore play an active role in assessment of risk prior to participation, and prescription of appropriate types and 'doseage' of physical activity for those who are motivated to increase their physical activity or exercise levels, or to participate in sporting activities.

What is "Sports" in the context of physiotherapy?

In the context of physiotherapy, "sports" is defined as:
"*recreation, pastimes, play, games or activities involving physical exercise*".[2] As such, although the word 'sports' has connotations of participation only in organised and more elite levels of sports, the term "sports" in the context of "sports physiotherapy" in fact relates to all forms of physical activity.

Definition of a "Sports Physiotherapist"

"*A sports physiotherapist is a recognised professional who demonstrates advanced competencies in the promotion of safe physical activity participation …… in "athletes" of all ages and abilities….. using* ***sports specific*** *knowledge, skills and attitudes*".[2]

Advanced Sports Physiotherapy Competencies

"Promotion of a Safe, Active Lifestyle" is one of the advanced Sports Physiotherapy competencies identified in the international "Sports Physiotherapy Competencies and Standards" document.[2] In this document, specific, advanced sports physiotherapy knowledge and skills relating to physical activity include:

Knowledge of:

- optimal activities for different individuals and population groups
- health promotion principles
- guidelines for optimal participation
- contraindications to specific types of movement and exercise that relate to specific individuals and population

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groups, such as individuals with chronic conditions

- influences on participation including physical, psychological and social influences on activity participation.
- understanding of behaviour change
- the availability and referral pathways of relevant organisations and facilities for specific types of exercise and sport for individuals of all ages and abilities
- individuals and agencies that develop and influence policies and guidelines that affect the promotion of physical activity, exercise and sport

Analysis of:

- current level of participation and any factors that might influence their enjoyment and safety
- the physical and psychological benefits of different types of physical activity and exercise in specific individuals with varying needs, for example, of different genders, ages, and abilities
- different types of physical activity and exercise measurement.

Assessment:

- collect relevant subjective and physical data to assess the individual's ability to participate in physical activity and exercise, identifying potential risks
- ask questions that relate to preference and personality, allowing suggestions about the most enjoyable types of activity for different individuals
- analyse and estimate an individual's strengths, weaknesses, and preferences in relation to movement and physical activity

Prescription:

- determine an appropriate level of participation in physical activity or exercise
- identify any contraindications, using appropriate tests or referral to another professional
- estimate safe and optimal progression of participation in different types of activity integrating knowledge about the individual with consideration of exercise training principles

Summary

The promotion of physical activity is important for all health professionals and encouragement to increase 'incidental' levels of physical activity should be provided at every opportunity. In addition to "promotion", the **prescription** of **safe participation** in physical activity for individuals of all ages and abilities, at all levels of activity, exercise or sport is a critical skill for sports physiotherapists. It is the ability to assess risk and prescribe safe levels of physical activity (including exercise and sport) that is the key difference between simply "promoting" (the responsibility of all health professionals) and "prescribing" (linked to specific sports physiotherapy competencies) physical activity. Adequate risk assessment and appropriate activity prescription is the key to the success of any health strategies intent on tackling this global population health issue and sports physiotherapists are well placed to be involved at both service delivery and policy level.

Sports Physiotherapy New Zealand will be running a "*Promotion and Prescription of Physical Activity and Exercise*" course in the second half of 2013 in which these advanced sports physiotherapy competencies will be covered. More details will be provided as they become available.

References

1. Caspersen C, Powell K, Christenson G. Physical activity, exercise and physical fitness: definitions and distinctions for health-related research. Public Health Reports. 1985;100:126-30.

2. Bulley C, Donaghy M, Coppoolse R, Bizzini M, van Cingel R, DeCarlo, et al. Sports Physiotherapy Competencies and Standards. Sports Physiotherapy For All Project. [online]. 2005.

SPNZ Website Upgrade and Public Resources

The 'find a sports physiotherapist' is now live on our website. It is split into regions for easy searching and lists can be altered to be searched by first name, last name, town and key sport.

This feature has been designed to allow you as Members of SPNZ to promote yourself to your colleagues and the public. For those who have not viewed it click here to access it. As we develop more public information we will start promoting the website to the public, funders and other interested parties. If you haven't sent me your details they can be added by filling out the form here

As mentioned this is for you to promote your interests and expertise and not that of your clinic so please fill the form out as clearly as possible.

SPNZ Member Benefits

Remember to take advantage of the full range of SPNZ member benefits:

- FREE online access to JOSPT (value approx USD$275)
- FREE Editions of the Quarterly APA "Sports Physio" Magazine
- 25% Discount on all McGraw-Hill book publications
- Funding Support for continuing education and research (Asics Education Fund).
- Substantial discount, Advanced Notice and preferential placing on SPNZ Educational Courses.
- Access to website with clinical and relevant articles.
- Sports Physiotherapy Forum to discuss ideas and ask questions
- Bi-monthly SPNZ Bulletin featuring Activity, Course and information updates.
- FREE classified advertising in the SPNZ Bulletin

International Journal of Sports Physical Therapy - Individual Subscriptions Available

The IJSPT journal is available to purchase for individual members.

SPNZ members interested in subscribing to this journal can purchase an individual subscription through the journal directly. To purchase a subscription go to the IJSPT website, and click on "subscriptions".

Subscription rate for 2012:

- Individual $60 (USD)
- Student $35 (USD)

Current issue contents: (To view contents of the current issue click here.)

- Differences in dynamic balance scores in one sport versus multiple sport high score athletes.
- Effects of athletic taping and kinesiotaping on measurements of functional performance in basketball players with chronic inversion ankle sprains.
- Rehabilitation after hip arthroscopy and labral repair in a high school football athlete.
- Rehabilitation after arthroscopic rotator cuff repair: current concepts review and evidence-based guidelines.
- The effectiveness of resistance training using unstable surfaces and devices for rehabilitation.
- Lisfranc fracture-dislocation in a female soccer athlete.
- Medical sports injuries in the youth athlete.
- Thoracic region self-mobilization: a clinical suggestion.

And more…

FEATURE

GREEN PRESCRIPTIONS

More People, More Active, More Often

by Sophie Vabulis, Physical Activity Manager, Sport Canterbury

Physiotherapists work with a wide range of people to optimise their physical activity, from elite athletes to older people seeking to remain active as they age. More than any other profession, they prevent chronic disease by helping people become more active. There is now indisputable evidence for the benefits of physical activity that include primary and secondary prevention of cardiovascular disease, diabetes, specific cancers (in particular breast and colon cancer) and osteoporosis. In this edition of the SPNZ Bulletin, we feature "Green Prescriptions". A Green Prescription (GRx) is a health professional's written advice to a patient to be physically active, as part of the patient's health management. It's a smart and cost-effective way to help people stay healthy.

Sophie Vabulis is the Physical Activity Manager for Sport Canterbury, and the Green Prescription Area Manager for Canterbury/West Coast. Sophie has provided us with information on Green Prescriptions, their background, who is eligible, what the programme involves, the support provided to patients, and how you can make a "Green Prescription" referral. She has also provided a list of valuable resources and websites for patient use. For more information on Green Prescriptions in your area contact the "Green Prescription Coordinator" at your local Sports Trust.

For more info on Green Prescriptions click here.

What is a "Green Prescription"?

Green Prescriptions are a health professional's written advice to a patient to be physically active as part of the patient's health management. Recognising that there is an important distinction between 'physical activity' and 'exercise' in mobilising people who are currently inactive, GP's and Health Professionals can prescribe physical activity in order to encourage positive health outcomes.

Can you provide some background to Green Prescriptions?

Green Prescriptions began in 1998. The initiative was transferred from Sport and Recreation New Zealand in 2009 to the Ministry of Health with the expectation in future that funding would be more closely aligned with other services helping manage long term conditions.

Most referrals for Green Prescriptions are to support prevention and management in patients with chronic disease and long term conditions such as cardiovascular disease and diabetes. In particular, Green Prescriptions encourage patients to manage their own conditions by increasing physical activity and improving nutrition.

FEATURE

Green Prescriptions continued…..

Core funding was transferred from SPARC to the Ministry with an additional one-off funding grant which ended in July 2012. On 1 July 2012 the Ministry devolved GRx funding and management to District Health Boards (DHBs) to enable better co-ordination of initiatives at a regional level and fit with plans for better integration of health services. In order to maintain national consistency, cost effective resource development and bench marking, the Ministry will retain the areas of resource development, monitoring and evaluation. Some DHBs and PHOs contribute funding to the initiative to provide group programme support and strengthen the nutrition component of Green Prescriptions.

There are currently eighteen providers contracted to deliver the GRx initiative to referred patients and families. Fourteen of these are regional sports trusts, two NGOs (HealthWest, Otara Health) and two are PHOs (Nelson Bays and Marlborough/Kimi Hauora). Providers cover all DHB districts. These providers will continue unchanged until at least June 2014.

How does someone get a "Green Prescription"?

Most Green Prescriptions are prescribed by GP's and Practice Nurses but there has more recently been an increase in prescriptions coming through from Health Professionals. Referrals can be done electronically using software such as ERMS or MedTech, or can be manually written on a script pad.

The criterion surrounding a prescription includes:

1. the patient being an Inactive adult (18 years+ and doing less than 30 minutes moderate activity most days of the week);
2. they must be medically stable to do low to moderate activity
3. and have a willingness or readiness to make a change to their activity levels.

How do you determine whether someone is ready to change their 'physical activity behaviour'?

Green Prescriptions are a good option for those that are currently inactive but thinking of becoming more active or those who do some activity but are wanting to increase this level. These people are usually interested in discussing their physical activity and nutrition with their healthcare providers. Under the 'Stages of Change' model these people are usually in the Preparation stage – they have identified there is something to be done and they are getting ready to take action. Their motivation for changing is reflected by statements such as: "I've got to do something about this. Something has to change. What can I do?".

To assess whether your patient is ready to change their physical activity behaviour – use the "States of Change" model – attached to this Bulletin, or from the Green Prescription website

.

What type of interventions do they receive and who provides these?

Support will vary from region to region. Common support options available are:

- Monthly telephone calls for 3-4 months
- Face to face meetings for 3-4 months
- Group support in a community setting for 3-6 months

Regardless of the support option provided, all participants have an initial consultation either over the phone or face to face.

During this consultation, together with their GRx support person, the participant will discuss:

- Current lifestyle and activity levels
- Barriers to increasing activity
- Short and long term goals
- Suitable activity options

An activity plan is then developed that is matched to the participants' needs and lifestyle.
Group support options range from blocks of activity such as Aqua Blocks or circuit groups through to weekly sessions for

Green Prescriptions continued…..

10 weeks trying a variety of activity options accompanied by education sessions covering topics such as motivation, goal setting, nutrition and physical activity and mental health.

What type of support is offered during the process?

A Green Prescription patient support person will help their patient to set goals and support motivation. They will also provide advice and ideas of physical activity options suitable for the individual.
After the initial consultation patients have monthly follow ups (normally over the phone) for up to 4 months. During this time further support is provided towards the longer term goal of the participant feeling ready to carry on with independent activity at the completion of their GRx.

How are the results/outcomes of Green Prescription Programmes monitored?

The Ministry of Health does an annual survey each year to monitor the GRx initiative. The ongoing success of GRX is measured against nine key performance indictors developed by the Ministry:

1. Minimum of 50% of GRx participants are more active after 6-8 months of receiving their GRx – achieved by 18 out of 19 contract holders
2. Minimum of 55% of Grx participants have made changes to their diet since receiving GRx- achieved by 19 out of 19 contract holders
3. Minimum of 70% of GRx participants feel more confident about doing physical activity- achieved by 19 out of 19 contract holders
4. Minimum of 85% of Grx participants felt the physical activity suggested was appropriate for them- achieved by 15 out of 19 contract holders
5. Minimum of 75% of Grx participants are motivated to get/stay physically active- achieved by 15 out of 19 contract holders
6. Minimum of 80% of Grx participants are aware of and understand the benefits of physical activity- achieved by 14 out of 19 contract holders
7. Minimum of 70% of GRx participants have noticed positive health changes- achieved by 14 out of 19 contract holders
8. Minimum of 75% of GRx participants are encouraged to continue physical activity by their referrer- achieved by 19 out of 19 contract holders
9. Minimum of 80% of GRx participants are satisfied with the overall service and support provided- achieved by 15 out of 19 contract holders

Can Physiotherapists refer someone for a “Green Prescription”?

As the initiative has evolved, so have the number of health professionals who have been approved to ‘prescribe green’. Health Professionals who can refer varies across regions, depending on funding restrictions. It is best to contact your local provider (contact information attached) to discuss the referral pathway for Physiotherapists in your area.

Where can the referrals be found and where should they be sent?

Referrals can be found by contacting each Green Prescription provider for their Health Professional Referral form. Some Regional Sport Trust providers will have the form on their website. You can also request a script pad to write prescriptions manually. Referrals can be faxed, posted or emailed to the corresponding Green Prescription team in your area.

How long would it take for someone to contact the person after a referral is sent?

Once a complete referral signed off by the patient’s GP or Practice Nurse is received, contact will be made as soon as possible by phone or letter within seven days of receiving the referral.

Would the referring physiotherapist receive any feedback on the person’s progress?

In regions where referrals are accepted from Health Professionals other than GP’s and PN’s, at the completion of a participant’s Green Prescription discharge information is send to both the referring Health Professional and the patient’s medical practice. In some regions, health professionals are also sent the patient’s activity letter outlining the activity plan that is discussed in the initial meeting between patient and Grx support person.

FEATURE

Green Prescriptions continued…..

Useful Resources

Phone 0800 ACTIVE

This is a free phone number which goes through to each provider and splits into regions.

In Canterbury we cover down to Waimate and over to the West Coast, and callers can pick to be put through to our Christchurch, Ashburton, Timaru or West Coast office. This is a another tool physios could use to either contact Green Prescription themselves or give to patients to call regarding activity options in their area.

Advice on Staying Active for Health (Patient Resource)

http://www.health.govt.nz/yourhealth-topics/physical-activity?icn=yh-physical&ici=readmore

"Getting Active" Green Prescription Printable Posters and Flyers

http://www.health.govt.nz/our-work/preventative-health-wellness/physical-activity/green-prescriptions/green-prescription-resources-health-professionals

Patient Resources:

http://www.cph.co.nz/Resources/Resource_List.asp?t=1&mc=21

- Medical conditions and physical activity
- Cycling
- Running programme
- Push-Play - walking
- Push-Play - walk the dog
- Push-Play – skate
- Push-Play – netball
- Push-Play – beach cricket
- Be Active Every Day (5-18 year olds)
- Be Active Every Day (adults)

Websites

http://www.health.govt.nz/our-work/preventative-health-wellness/physical-activity/green-prescriptions

CLINICAL SECTION

ARTICLE REVIEW

Guidelines for Promoting Physical Activity to Adults

Reference: SPARC. (2005). *Guidelines for promoting physical activity to adults.* Astra Print Limited: Wellington, New Zealand.

The full document can be downloaded from the following link:
Movement=Health

This review summarises the guidelines and benefits of physical activity for New Zealanders. One-third of adults in New Zealand are not exercising regularly enough to benefit their health. Research shows that frequent physical activity can significantly reduce the risk of developing Alzheimer's disease, asthma, colon and breast cancer, heart disease, stroke and diabetes in adults. It also helps to reduce and control anxiety, stress and depression, improve chronic obstructive respiratory disease, osteoporosis and osteoarthritis symptoms and reduce falls in older adults. The cost of obesity in New Zealand annually is more than 100 million dollars. It is estimated that a 10% increase in exercise levels could save up to 55 million dollars by reducing health costs, increasing longevity and decreasing dependence and disability.

The New Zealand guidelines for physical activity include four objectives.

- *To see exercise as an opportunity, not a chore*: This includes changing attitudes towards physical activity and encouraging people to see it as a way to increase their fitness and benefit their health, instead of dreading it.
- *To be active in as many ways and as often as possible*: The most inactive individual can gain significant health benefits by adding only a little physical activity to their day. This can include taking the stairs instead of the lift, or walking instead of taking the car, or adding an extra chore to the housework.
- *The recommendation is to take part in at least 30 minutes of moderate-intensity exercise most days of the week:* This has shown to improve glucose metabolism, blood pressure and cholesterol and to help weight loss. Moderate-intensity exercise is activity which makes a person breathe a little harder than normal such as brisk walking, cycling, kapa haka or gardening. For some people shorter sessions of 10 or 15 minutes of activity may be an easier way to reach a 30-minute goal.
- *If the individual is able to, include some vigorous exercise in this routine:* This is exercise which makes an individual breathe a lot harder such as rugby, netball, aerobics or jogging. This results in even greater health benefits such as protection against heart disease and improved fitness levels. A minimum of 20 minutes on 3-4 days a week should be performed, starting at an easier level and increasing the intensity as able.

Advise people to choose activities they enjoy, provide them with suggestions. If time is limited come up with practical and fun ways to add activity to their day e.g. mopping the floors to music; racing the lift when using the stairs; dancing when hanging out the clothes. Ways to encourage people to participate in physical activity are to suggest cheap or free options such as bushwalks, swimming or cycling. Be creative meet a friend for a walk rather than for a cup of tea; walk the kids to school or park further away from your destination. Remind people of the benefits of exercise such as improved health, increased energy, improved confidence and control. Suggest they treat themselves by going out dancing or fishing, enjoy a healthy café lunch with a walking group; or buy a new pair of jeans after losing some weight.

Barriers to participating in physical activity can include:

- Lack of time
- Other responsibilities (family, job)
- Lack of knowledge about facilities and opportunities to be active
- Feelings of inadequacy (e.g. negative perception of body image)
- Fear of failure
- Language (new immigrants)
- Injury, disability or poor health.
- Lack of motivation and no one to be physically active with

Ways to help overcome these is to problem solve to find activities that they can easily fit into their lifestyles, for example housework, using the stairs, walking the dog or playing with the children. Provide them with information about local facili-

CLINICAL SECTION

ARTICLE REVIEW CONTINUED...

ties and classes available. Set up buddy systems for support and motivation. Link in with agencies that support those with special needs i.e. Arthritis NZ, Heart Foundation, Cardiac Clubs. Encourage those with chronic health conditions to see their GP as they may be a candidate for a Green Prescription.

Older adults may need to consult their GP before starting exercise, but no matter what their level of fitness or age exercise is beneficial. For some 30 minutes may not be achievable, but even increasing their activity by small amounts can result in significant benefits. The most gains are seen when sedentary older adults add in a little more activity a little more often. Even five minutes of walking to the letter box or getting up to prepare a drink can make a difference. In healthier older adults moderate level exercise can include brisk walking, golf, table tennis, gardening, kappa haka, or ballroom dancing. It is also important to encourage balance exercises in older adults to help to prevent falls.

For any older person being active on a regular basis can:

- maintain and/or improve strength and flexibility
- improve balance and coordination
- reduce the incidence and severity of falls
- reduce stress and anxiety, reduce the risk of depression and enhance their
- mood and self-esteem
- reduce the risk of suffering from cardiovascular diseases, cancer, diabetes
- and osteoporosis
- enhance sleep quality
- lead to new friendships
- enhance independent living

Nutrition is also important to address in combination with exercise for a healthy lifestyle. This includes choosing the right foods from each of the four major food groups i.e. fruit and vegetables, milk, lean meat and cereals; limiting alcohol and drinking plenty of water. It is important to avoid foods with saturated fat, high in salt, and high in sugar. Exercising regularly and eating right can help individuals lose weight and prevent them putting it on again.
There are five dimensions to consider when participating in physical activity.

- *The frequency, or how often physical activity should be completed:* recommended at least five days a week over a lifetime
- *The intensity i.e. how much effort is appropriate*: light, moderate or vigorous, the general rule is the harder you work the more health benefits. This can be measured by three simple means, the talk test method i.e. how much a person can talk during the activity, the Borg Rating of Perceived Exertion (the scale for this is on the SPARC website) and the Metabolic Equivalent (MET) measurements, where every activity has been compared to the amount of energy expenditure for sitting quietly.
- *The time i.e. what length of time should each activity take:* 150 minutes of moderate intensity activity per week is the general recommendation; this can be done in small portions and be accumulated if necessary.
- *The type of activity*: a balance of aerobic and strength based exercise is ideal
- *The social context*: This can include any environment for example sport, work, transport or household chores.

CLINICAL APPLICATIONS:

This guideline includes recommended activity levels for adults and provides a large variety of suggestions for becoming physically active for any ability. It outlines barriers to participating in physical activity and tips to overcome these barriers that can be used in the clinic. It also briefly describes the green prescription which we can refer patients to their GPs for. This entails funding for a support person to monitor and guide/encourage the patient through subsidised and tailored physical activities.

Reviewed by Monique Baigent BHsc (Physiotherapy)

RESEARCH SECTION

SPNZ PHYSIOTHERAPY RESEARCH REVIEWS

Exercise Guidelines for Elderly, Pregnancy, Diabetes and Children

www.sportsphysiotherapy.org.nz/resources

The perceptions of physical activity in an elderly population at risk of falling: a focus group study.

Hutton L, Frame R, Maggo H, Shirakawa H, Mulligan H, Waters D, Hale L (2009). The Perceptions of Physical Activity in and Elderly Population at Risk of Falling: a focus group study. NZ Journal of Physiotherapy 37: 85-92.

Article Summary

The New Zealand health strategy lists increasing physical activity as one of the 13 population health objectives for short to medium term action. Increasing activity in the elderly is crucial as a notable decline in the physical activity levels of New Zealanders occurs after the age of 65. Fifty-seven percent of women in the 65-74 year old age group do not meet the recommended level of activity compared to 49% of men; this rises to 74% of women in the 75+ year category and 59% of men. This study looked at a series of focus groups of participants recruited from a larger RCT. Twenty participants took part with an average age of 73yrs (68-81) with 90% women.

They identified four themes in the interview process of the participants; views, barriers and promoters, benefits and behaviours. All of the participants agreed in the importance of physical activity but the degree of its importance and the type of activity differed. Many of the subjects mentioned that health professionals especially GPs could encourage activity participation more. They also reported that small exercise groups with similar aged participants, which were not too difficult, competitive and in a good location with good access were important factors to them. The benefits of activity were well established and contributed to the participants feelings of satisfaction and achievement and made them more aware of their behaviour to activity.

Clinical Significance / Applications

This was an interesting qualitative study. It gives the therapist an indication to the factors that affect the elderly population from joining in activity/exercise classes. Whether it is the accessibility and location from bus stops, classes held at suitable times for the buses, to the number of participants in each class. Although the participants in this study were selected from a wider RCT, it demonstrates that there are many elderly people who are interested in participating in physical activity and gaining more knowledge of what they can do. In the changing population demographics of the world more information and time is going to be spent on educating the elderly population on maintaining their fitness and continuing in the work force. By doing so, preventing unnecessary drain on the health service by keeping as active as possible and preventing sedentary diseases. This is a useful article for the sports clinician and more should be done to target our older population in to being more active.

Reviewed by Charlotte Raynor MPhty, BSc(Hons), NZRP, MNZSP

RESEARCH SECTION

SPNZ PHYSIOTHERAPY RESEARCH REVIEWS

Exercise guidelines for Elderly, Pregnancy, Diabetes, Children continued……..

www.sportsphysiotherapy.org.nz/resources

Exercise Guidelines in Pregnancy; New Perspectives

Zavorsky G, Longo L (2011). Exercise Guidelines in Pregnancy. Sports Medicine 41: 345-360.

Article Summary

The American College of Obstetricians and Gynaecologists (ACOG) published exercise guidelines for pregnancy in 2002. These suggested that in the absence of medical or obstetric complications 30 minutes or more of moderate exercise a day on most, if not all, days of the week is recommended for pregnant women. However they did not define 'moderate intensity' exercise. In 2007 updated physical activity recommendations were published by the American College of Sports Medicine (ACSM) and the American Heart Association (AHA). These included definitions of 'moderate' and 'vigorous' exercises and provided recommendations for muscle strengthening activities. Zavorsky and Longo believed that these updated recommendations should be coupled with the 2002 ACOG guidelines for new pregnancy exercise guidelines.

- Women of child-bearing age are at an increased risk of gestational diabetes (GDM), which is strongly linked to obesity
- Obese women have an increased risk of foetal, neonatal and maternal morbidity
- Regular physical activity performed before and during pregnancy has been shown to reduce the incidence of GDM.
- Duration of labour is inversely associated with aerobic capacity after adjusting for birth weight. An increased aerobic fitness was associated with shorter labour in nulliparous women who started labour spontaneously.
- Zavorsky and Longo recommend that pregnant women should build up to continuous steady-state aerobic exercise of about ≥65% of aerobic capacity (vigorous exercise), which is 60% of heart rate reserve (HRR) or 70-75% of maximum heart rate (HRmax). This recommendation is within the range specified by the Society of Obstetricians and Gynaecologists of Canada (SOGC)/ Canadian Society for Exercise Physiology.
- Reduced risk of GDM and pre-eclampsia seen in women exercise between 3 months and 1 year before or during pregnancy
- Over 5 hours a week of exercise during pregnancy reduced the risk of preterm birth by 18%
- Limited strenuous exercise above the anaerobic threshold has minimal effects on total uterine and umbilical oxygen delivery and VO2. Brief intense exercise also does not cause foetal distress.
- The intensity of exercise for pregnant women is recommended to be 12-14/20 on the Borg RPE. RPE is the perceived, subjective, overall effort of exertion and fatigue from 6 (no exertion) – 20 (maximal exertion). 6=No exertion; 7-8=Extremely light; 9-10=Very light; 11-12=Light; 13-14=Somewhat hard; 15-16=Hard; 17-18=Very hard; 19=Extremely hard; 20=Maximal exertion.
- Heart rates are modified in the SOCG guidelines based on the increased maternal heart during pregnancy. Target HR zone for non-obese pregnant woman 20-29yrs is 135-150bpm; 30-39yrs 130-145bpm; ≥40yrs 125-140bpm. This equates to 71-79% of predicted HRmax

Clinical Applications

Zavorsky and Longo include information on muscle strengthening guidelines and contraindications to exercise for pregnant women. This is an informative article on the guidelines for pregnant women and exercise, and is very useful for the sports clinician.

Reviewed by Charlotte Raynor MPhty, BSc(Hons), NZRP, MNZSP

RESEARCH SECTION

SPNZ PHYSIOTHERAPY RESEARCH REVIEWS

Exercise guidelines for Elderly, Pregnancy, Diabetes, Children continued……..

www.sportsphysiotherapy.org.nz/resources

Exercise and Type 2 Diabetes

American College of Sports Medicine and American Diabetes Association (2010). Special Communications. Exercise and Type 2 Diabetes. Medicine and Science in Sports & Exercise. 2282-2303

Article Summary

Type 2 Diabetes Mellitus (T2DM) is a significant cause of premature mortality and morbidity related to cardiovascular disease (CVD), blindness, kidney and nerve disease and amputation. Diet and physical activity (PA) are central to the management and prevention of T2DM. A single bout of aerobic exercise increases insulin action and glucose tolerance for more than 24 hours but less than 72 hours in all individuals.

In individuals with T2DM, PA improves insulin action, blood glucose control and fat oxidation and storage in muscle. Low -Density Lipoprotein Cholesterol (LDL-C) has been shown to lower with aerobic training. However combined weight loss and PA may be more effective than aerobic training alone on lipids. PA may slightly reduce systolic blood pressure (BP) but reductions in diastolic BP are less common. For prevention of T2DM, a higher level of PA is associated with a reduced risk for T2DM, regardless of method of activity.

Exercise Prescription for aerobic training in individuals with T2DM is recommended as:

- *Frequency* – At least three times a week with no more than two consecutive days between bouts because of the transient nature of exercise-induced insulin improvements.
- *Intensity* – At least moderate intensity (approximately 40-60% of $VO_{2max.}$
- *Duration* – Minimum of 150 minutes per week. This can be performed in bouts of at least 10 minutes and spread throughout the week.
- *Mode* – Any form of aerobic exercise that uses large muscle groups.

Exercise Prescription for resistance training in individuals with T2DM is recommended as:

- *Frequency* – At least twice weekly on non-consecutive days.
- *Intensity* – Moderate to vigorous (50% to 80% of 1 repetition maximum).
- *Duration* – Minimal of 5 to 10 exercises involving the major muscle groups, at 10 to 15 repetitions to near fatigue, but as many as three to four sets.

Clinical Applications

Participation in PA for individuals with T2DM or individuals at risk of developing T2DM has been shown to be beneficial on insulin action, blood glucose control, BP and lipid profile when combined with diet management.

Adherence to a prescribed PA is low. Therefore, practitioners are encouraged to use factors such as choice and enjoyment in helping determine how an individual would meet recommended guidelines. Exercise studies have shown the greatest effect on blood glucose control when individuals are supervised by qualified exercise trainers. Encouraging individuals to foster social support from friends, family, and health care providers will help promote PA in these individuals.

Reviewed by Amanda O'Reilly BPhty (Otago)

RESEARCH SECTION

SPNZ PHYSIOTHERAPY RESEARCH REVIEWS

Exercise guidelines for Elderly, Pregnancy, Diabetes, Children continued……..

www.sportsphysiotherapy.org.nz/resources

Exercise and Children

Cavill N, Biddle S, and Sallis J (2001). Health Enhancing Physical Activity for young people: Statement of the United Kingdom Expert Consensus Conference, Pediatric Exercise Science 13: 12-25

Activities for children and young people | Ministry of Health

Article Summary

Promotion of exercise within the adult population has been a focus of recent years but the same can not be said for that of children. Due to much debate regarding the nature and extent of any public health problems in respect to physical activity in children, in 2001 the UK put together public health recommendations regarding young people (5-18 years old) and physical activity.

The 3 recommendations were:

- All children should participate in physical activity of at least moderate intensity for 1 hour per day
- Children who currently do little activity should participate in physical activity of at least moderate intensity for at least 30 mins per day
- Twice a week some of these activities should help enhance and maintain muscular strength and flexibility and bone health.

Because activity related chronic diseases such as CV diseases, cancers, Type II diabetes are uncommon in youth the evidence of the relationship between physical activity and health outcomes in children is weak. There is consistent evidence that physical activity for children enhances psychological well being, self esteem, and moral and social development, and contributes to reducing body fat and chronic disease risk factors. Participation in physical activity does increase the risk of musculoskeletal injuries but it is recommended that for most children the benefits outweigh the risk.

Clinical Applications

From a health perspective the three main rationales for promotion of exercise in children are

- To optimise physical fitness, current health and well being and growth and development
- To develop active lifestyles that can be maintained through to adult life
- To reduce the risk of chronic diseases of adulthood

Exercise is planned, structured and repetitive bodily movements done to improve or maintain one or more components of physical fitness.

- **Aerobic** activities increase their heart rate and keep them fit.
- **Muscle-strengthening** activities build strength in the muscles, tendons and ligaments. They improve joint function and reduce the potential for injury.
- **Bone-strengthening,** weightbearing/loading activities, games like hopscotch, skipping, trampolines or sports like netball, rugby. Plus they can double as aerobic and muscle-strengthening activities.

Children don't need formal muscle-strengthening programmes such as weight lifting. For younger kids, things like gymnastics, climbing trees and playing on the jungle gym will strengthen their muscles. Such activity may be performed in a continuous fashion or intermittently accumulated throughout the day.
Older children and teenagers may start structured resistance or strength training (and circuit training) as part of sports programmes or generally to increase their strength.
Children and teens should avoid power lifting, body building, and maximal lifts until they reach physical and skeletal maturity.

Activity intensity is how hard your body is working when being physically active. Intensity is split into three types: light,

RESEARCH SECTION

SPNZ PHYSIOTHERAPY RESEARCH REVIEWS

Exercise guidelines for Elderly, Pregnancy, Diabetes, Children continued……..

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moderate and vigorous.

- **Light intensity** includes common daily activities that take little effort but contribute to total daily energy expenditure.
- **Moderate intensity** activity will cause a slight, but noticeable, increase in breath and heart rate. You can still carry on a conversation.
- **Vigorous intensity** activity will get you puffed – you won't be able to do these activities and chat at the same time.

As physiotherapists we can promote the daily participation in moderate to vigorous activity in children. Evidence has shown three priority groups for targeting interventions, girls aged 12-18 years, low socioeconomic status and older adolescents (16-18 years).
Enjoyable experiences of physical activity need to be a normal part of childhood Clinical Applications

Reviewed by Deborah Nelson BPhty, PGD Musculoskeletal

RESEARCH SECTION

RESEARCH REVIEWS

Register (FREE) and download the latest "NZ Research Reviews"

http://researchreview.co.nz

Bone Health Research Review™

- Anti-sclerostin antibody AMG 785
- Odanacatib improves BMD
- BMD changes and fracture prediction
- Antihypertensive drugs and hip fracture risk
- Non-benzodiazepine hypnotics and hip fracture risk
- Duration and safety of osteoporosis therapy
- Osteocalcin regulates bone formation via the CNS
- Denosumab + teriparatide improve BMD
- Calcium supplements and CV disease risk
- Oestrogen deficiency mediates bone loss in hypogonadal men
- Bone loss after bariatric surgery

Foot & Ankle Research Review

- Tibialis posterior tenosynovitis and flat feet in RA
- Patient perspectives on foot-health education in RA
- Perception of foot problems and care in JIA
- Plantar fasciitis: symptom duration/pain/function
- Foot ulceration in RA: healthcare provision
- Foot and ankle kinematics in RA: influence of pathologies
- Orthoses for hallux valgus
- Racial differences in foot type/disorders
- Systemic sclerosis: pain, function and intervention
- MTP 1 joint OA and healthrelated QoL
- Foot-related healthcare use in RA

Rehabilitation Research Review

- System factors affect functional recovery
- Yoga may improve balance post-stroke
- Optimising custom-made diabetic footwear
- When can sick-listed employees resume work?
- Pain coping strategies used by workers
- Frustrations experienced with chronic pain
- Health literacy in rehabilitation
- AEs under-reported with chiropractic treatments
- Chiropractic in acute musculoskeletal chest pain
- Deconstructing the (un)motivated client

Sports Medicine Research Review™

- Cognitive decline and aging
- Altitude training and elite athletes' performance
- Knee laxity after complete ACL tear
- Doping and supplementation: attitudes of athletes
- Imaging in patellofemoral instability
- OC pill for the female athlete triad
- Interpreting ECG in competitive athletes
- '23½h' video goes viral
- Hamstring eccentrics are essentials
- Asymptomatic status following sports concussion

Pain Management Research Review™

- ACT for older patients with chronic pain
- Intensive CBT programme for chronic low back pain
- Gabapentin and pregabalin prevent chronic postsurgical pain
- Exercise training attenuates neuropathic pain in rats
- Continuous femoral nerve analgesia after knee surgery
- Perioperative systemic alpha 2-agonists
- Opioid switching to methadone
- Subcostal transversus abdominis plane block
- A new 'platform' concept for pain management
- A shortened, restructured TOPS instrument

Hip & Knee Surgery Research Review

- Diagnosing periprosthetic joint infection
- TJA benefits nonagenarians
- Local tissue reactions after THA
- Medialise the hip centre of rotation in THA?
- Local anaesthetics + corticosteroids: chondrotoxicity
- Enoxaparin + aspirin chemoprophylaxis regimens
- Smoking increases TKR failure rate
- MPFL reconstruction in patellofemoral instability
- Conventional vs computer-assisted ACL reconstruction

http://www.researchreview.co.nz

RESEARCH SECTION

JOURNAL OF ORTHOPAEDIC & SPORTS PHYSICAL THERAPY

Click on the arti-

December 2012; Volume 42, Issue 12 www.jospt.org

Click on the article title for a direct link to the abstract

EDITORIAL

Clinical Trial Registration in Physiotherapy Journals: Recommendations From the International Society of Physiotherapy Journal Editors

Leonardo O.P. Costa, Chung-Wei Christine Lin, Debora Bevilaqua Grossi, Marisa Cota Mancini, Anne K. Swisher, Chad E. Cook, Daniel W. Vaughn, Mark R. Elkins, Umer Sheikh, Ann Moore, Gwendolen A. Jull, Rebecca L. Craik, Christopher G. Maher, Rinaldo Roberto de Jesus Guirro, Amélia Pasqual Marques, Michele Harms, Dina Brooks, Guy G. Simoneau, John Henry Strupstad

RESEARCH REPORT

The Effects of Thoracic Spine Manipulation in Subjects With Signs of Rotator Cuff Tendinopathy

Stephanie Muth, Mary F. Barbe, Richard Lauer, Philip W. McClure

Upper Extremity Strength Characteristics in Female Recreational Tennis Players With and Without Lateral Epicondylalgia

Ann M. Lucado, Morey J. Kolber, M. Samuel Cheng, John L. Echternach

Loading of the Knee Joint During Ergometer Cycling: Telemetric In Vivo Data

Ines Kutzner, Bernd Heinlein, Friedmar Graichen, Antonius Rohlmann, Andreas M. Halder, Alexander Beier, Georg Bergmann

Do Patients Achieve Normal Gait Patterns 3 Years After Total Knee Arthroplasty?

Yuri Yoshida, Joseph Zeni, Lynn Snyder-Mackler

The Effects of Group Cycling on Gait and Pain-Related Disability in Individuals With Mild-to-Moderate Knee Osteoarthritis: A Randomized Controlled Trial

Amanda J. Salacinski, Kelly Krohn, Scott F. Lewis, Megan L. Holland, Kathryn Ireland, Gregory Marchetti

Foot and Hip Contributions to High Frontal Plane Knee Projection Angle in Athletes: A Classification and Regression Tree Approach

Natalia F. N. Bittencourt, Juliana M. Ocarino, Luciana D. M. Mendonça, Timothy E. Hewett, Sergio T. Fonseca

The Effects of Movement Pattern Modification on Lower Extremity Kinematics and Pain in Women With Patellofemoral Pain

Gretchen B. Salsich, Valentina Graci, Dwayne E. Maxam

MUSCULOSKELETAL IMAGING

Superior Labrum Anterior-to-Posterior Tear

Jonathan C. Sum, Reza Omid

Common Fibular (Peroneal) Neuropathy as the Result of a Ganglion Cyst

Edward P. Mulligan, Karen McCain

CLINICAL SECTION

ASICS REPORT

There has been an influx of trends that have hit the market in the last few years, whether for example that be toning shoes, barefoot shoes or super lightweight shoes to name a few. Most have come and gone or are in question for their merit right now... or the very least, the science behind them!...because most of these 'sensations' in footwear development has been driven purely by marketing!

The one good thing that has come out of all the 'trends' of late is the introduction of super lightweight footwear. It has taught us at ASICS that we had to address the weight of our treasured icon models and make them lighter... that was the plus to us of the lightweight trend.

For the masses, a good supportive and protective shoe works extremely well for them... and for the most common users of our icon models (the GEL KAYANO, GT2000 and GEL NIMBUS to name a few), hence we did not want to re-invent them but to bring them to the future. And to us, this was to reduce the weight of these iconic models, but still keep the `protection' factor at the highest level.

The craze in the last couple of years has been barefoot and/or super lightweight un-structured shoes.

The barefoot zealots have preached to the world, that our ancestors started out walking/running barefoot in everything they did in life... however I have the understanding that as man progressed and being an inventive race, we saw the Romans invent the sandal for their army to march vast distances...and why? PROTECTION!

I feel the next tangent in this whole argument will do a full circle and come back to what we have been doing for years, trying to protect the athlete. I am the first to admit we cannot answer the question of whether a shoe can offer reduction in injuries. There are too many variables to answer that one outright. But we can say a shoe does offer PROTECTION to many runners. In the next ensuing months and years the fact will be "how much shoe weight are you willing to give up reducing the protection, for YOU?" Something that only the runner themselves can assess. What we can give is shoe options with different weights and smooth guidance through gait..

As mentioned it will be up to the trustworthy footwear brands to offer PROTECTIVE footwear options and allow runners to make up their own minds what works for them. We will offer assistance with a chart to show how we built the shoe and what type of gait pattern and mileage we built them for.

The important thing is for a runner to get their gait analyzed by a specialist in the field before jumping into a selection. We will continue to work with the medical community and in particular our strong relationships with SMA, AAPSM and APA to make it easier for consumers to make an educated purchase for themselves. But the decision will be theirs!

What will become a norm in the future is people will most likely have 2 or even 3 different types of shoes in the cupboard in different weights and they will choose appropriately to the training run they may go on that particular day... e.g. fast work... lighter shoes!!

Mark Doherty
General Manager
Product AOP

CONFERENCE REPORT

FIJIAN NATIONAL SPORTS SCIENCE CONFERENCE

By Kate Polson

Bula! The inaugural National Sports Science Conference for Fiji was held in Suva on the 15th and 16th of September 2012. The keynote speakers were physiotherapists Dr Grant Mawston from Auckland University of Technology who presented on spinal management in sport and Kate Polson who presented on shoulder management in sport. It was a tremendous opportunity to see New Zealand physiotherapists being able to travel to Fiji and not only be involved in supporting a developing sports physiotherapy community but also discussing the role of physiotherapy in managing non-communicable disease.

The concept and drive behind the conference was to enhance sports participation and to improve the sports performance of the Fijian population, both at international and local levels. Thus conference attendees came from all backgrounds: sports physiotherapy, managing national teams, coaching, sports and conditioning, teaching at school level, medical and allied health services and university teachers of medical and physiotherapy professions, as well as physiotherapy students to name a few. As a result of this mix the presentations were varied and all encompassing to assist to lift the profile of sports in Fiji.

Grant spoke on the lumbar spine where he elaborated on the forces that the spine encounters in a normal and a sporting situation, and provided insight into the assessment techniques and interventions used to address poor posture and stabilization of the trunk. The presentation lasted all Saturday morning and included group work with 'model' spines, practical assessment of spine movement, exercises and understanding of exercise principles for the lumbar spine, again with practical demonstration and group work. On Sunday morning Kate Polson spoke on management of shoulder conditions inclusive of the rotator cuff and acromioclavicular joint, this was also followed by a practical demonstration and workshop on exercise management of the shoulder in a sporting situation, with both injury prevention and rehabilitation in mind.

Given the amount of questions during question time and conversation during intervals it was evident that both presentations were well received and that presentations and conferences of this nature have value for Fiji, should be repeated and supported where possible. There were difficulties with presenting to all levels of attendees, trying to upskill the medical professionals and to deliver information to coaching and support staff and teachers provided challenges for both of the speakers. However the relaxed but very professional forum and manner of the conference allowed for plenty of time for discussion and sharing of thoughts, inclusive of the conference dinner, where lots of thoughts were shared!

Local speakers made up the afternoon presentations. Topics included medical imaging, the psychology of sport, approaches to enhance sports participation, use of GPS in sport, exercise knowledge, injury rehabilitation and infection control. This all indicated to the guest speakers that the support and management of sports in Fiji is in good hands and that there is a strong unified approach to improving not only the national sporting performance but also to lift the profile and participation of sport and levels of activity across the Fijian population in general. It was outlined by several speakers that Fiji is facing a crisis with the rise of non-communicable diseases and obesity and that decline of physical activity contributes to this. This finding is not singular to Fiji, as New Zealand and other nations are also facing the same crisis, however what was inspiring at this conference was to see how Fiji is trying to approach this problem for her people, across the board from a Government ministerial level to those that work with young children.

It was an honour and privilege to be involved with this conference and to meet the people of Fiji who share a common interest in sport science at all levels. Vinaka Fiji, we will be back.

By Kate Polson
MHSc(Hons); Dip Phty, Dip MT, MNZCP; MNZSP

AWARDS

2012 STUDENT RESEARCH AWARDS

Each year SPNZ award $500 to the Student Research Project from both the University of Otago and AUT University that is considered to be high quality and of significance for sports and orthopaedic physiotherapy. The 2012 Award winners are announced below. Congratulations to the winners from both Universities and we look forward to brining you summaries of their projects in future Bulletins.

University of Otago:

Project: **"Does performance on the King-Devick screening test change following physical activity in young rugby league players?"** by:

- Samantha Leggat
- Nicola McCarthy
- Claire Maxwell
- Nicholas Naylor
- Elizabeth Vollebregt

100 YEARS OF EDUCATION, RESEARCH AND PRACTICE
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SCHOOL OF PHYSIOTHERAPY
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AUT University

Project: **"An investigation into the effectiveness of neuromuscular control and strength training rehabilitation in ACL reconstruction" by:**

- Tim Michels
- Anna Wardlaw

AUT
UNIVERSITY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

CONTINUING EDUCATION

Upcoming courses and conferences in New Zealand and overseas in 2013.
http://www.sportsphysiotherapy.org.nz/calendar.html

LOCAL COURSES & CONFERENCES

When?	What?	Where?	More information
See Physiotherapy NZ Website			Click Here

INTERNATIONAL COURSES & CONFERENCES

When?	What?	Where?	More information
2013			
28 Feb 2013	Clinical Edge – Discover the Sports Thorax	Sydney	Click Here
10 – 12 April 2013	4th International Congress of Shoulder and Elbow Therapists	Nagoya, Japan	Click Here
20 – 22 April 2013	International Conference on Sports Rehabilitation and Traumatology – Football Medicine Strategies for Muscle and Tendon Injury	London	Click Here
27 Oct 2013	World Congress on Low Back and Pelvic Pain	Dubai	Click Here

SPNZ SYMPOSIUM 2014

Symposium

Thanks for all those who have filled out the survey regarding possible venues and speaker ideas for our next symposium. We have had a good response and it is great to get some new ideas on speakers and topics. Due to the overwhelming support for Rotorua, we will be hosting the 2014 Symposium there. As there was also good support for Marlborough we are strongly considering this as the venue for 2016.

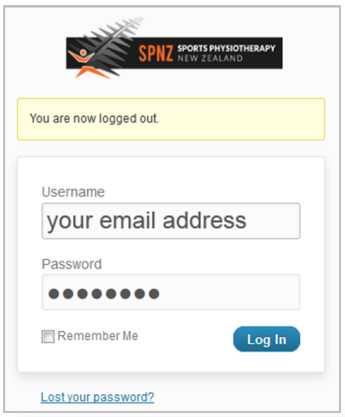
We are well into the planning stage of this and it is likely to be the 15th or 22nd March 2014, depending on the availability of the key note speaker, so put these dates in your diary. Like previous ones it is going to be very practically orientated with all speakers having good take home messages.

We are also looking at some workshops before the start of the first day. Watch this space for developments.

SPNZ WEBSITE

SPNZ MEMBERS SECTION

www.sportsphysiotherapy.org.nz/members



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Change Your Password: Your initial password will be "spnz2012". For security, please change this immediately to a password of your choice. In the top right hand corner hover your mouse over your name / email address. Go to "Edit My Profile". At the bottom of the page there is a new password box. Type in your new password. Retype it. Click the "Update Profile" box.

Lost Passwords: Click on "Lost Passwords" in the login box.

MEMBERS SECTION

Copies of all clinical article reviews and SPNZ Research Reviews that appear in the SPNZ Bulletin editions will be placed in the new "Resources" section, as well as an updated list of Open Access Journals. These will be available for all members to access at any time.

SPNZ's Research Reviews

- Osteoarthritis
- Injuries in Cricket
- Medical Exercise
- Sport and the Disabled Athlete.

List of Open Access Journals

(full text available to all members)

- Sports physiotherapy
- Sports medicine
- Sports science
- Rehabilitation

Clinical Article Reviews

- Barefoot running and the minimalist shoe debate
- Bench pressers' shoulder—overuse tendinosis of pectoralis minor
- Blood clots and plane flights
- Heat acclimatization guidelines for high school athletes
- Management of hamstring injuries—issues in diagnosis
- Sideline evaluation of bone and joint injury
- Occular injuries in basketball and baseball
- Clinical and MRI features of a cricket bowlers side strain

AND MORE...

Quick Links to Members Section

Resources

Copies of SPNZ's Research Reviews, a list of open-access journals (full-text available), clinical article summaries and other sports physiotherapy related articles.

Vacancies

Clinical Forum

Asics Education Grant Information

Student Member Information

Asics Apparel and Order Form

Bulletin Archives

Book Reviews

Calendar

Reports and Meeting Minutes

CLASSIFIEDS

POSITION VACANT

HAMILTON

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