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Your Prescription for Health
ExeRcise is Medicine Singapore
www.eims.sg

EIMS NEWSLETTER

PATIENT STORY

INTERVIEW WITH EIMS AMBASSADOR MR. JULIAN HEE

By Lauren Kelly Lewis

Q What was your lifestyle and health like before you started exercising regularly?

A I have been very active since I was a kid. I grew up in the 80s when there were no distractions from online entertainment, TV and video games. The only entertainment we had came from sports like badminton, table tennis and games like "catching". This active lifestyle has been ingrained in me and I carried it through adulthood.

Q What led you to start exercising? Was there any pivotal event?

A After being diagnosed with diabetes at the age of 13, I became aware of the importance of exercising.

Q What motivates you to continue exercising?

A I was unfortunately diagnosed with type 1 diabetes in my teens. Coincidentally, my youngest brother was also a diabetic since birth so it runs in the family and it is not related to unhealthy lifestyle. It made me aware of mortality. Going into hypoglycemia and into temporary psychosis is not fun, nor is the extreme fatigue associated with hyperglycemia. Exercise is part of my regime to keep my blood glucose optimal so I can be productive and enjoy what life offers.

Q Have you noticed any lifestyle or health changes since you started exercising regularly?

A I was able to discern the difference after I went into competitive sports, since I have been active since I was young. I was a school swimmer, and training was usually twice a day. This was on top of the school work that every kid has to do. Competitive sports made me more disciplined and focused and improved my time management

Q How can EIMS doctors do a better job of encouraging patients to exercise?

A I personally think that they are doing a great job as educators and role models. Some of them are my friends and we go skiing and kite surfing together. They don't drink. They don't smoke. They are into active lifestyle and have a great zest for life. Despite their busy schedule, they walk the talk.

Q What advice would you give to individuals with chronic medical conditions who feel like they don't have time, energy, or motivation to exercise?

A I can understand the lack of motivation part as it happens to the most disciplined of us occasionally. I would say try to find like-minded individuals and surround yourself with positive energy. Find an activity that you enjoy doing like playing frisbee or walking your dog; you will find time and be motivated to do it since it's something you enjoy, and it will not feel like a chore.

Q Why is exercise important to you?

A It's a means to an end – which is to be happy.

To learn more about our EIMS Ambassadors, visit: www.eims.sg/about-eims/ambassadors-of-eims.

CHAIRMAN'S MESSAGE

Dr Benedict Tan

The first half of 2014 was a productive and eventful time for EIMS. It included 2 general practitioner and 2 clinical fitness professional courses. Our public outreach efforts have expanded greatly this year to include the recent launch of the first EIMS compliant fitness corner and multiple lectures and booth presentations at conferences and expos targeting in Singapore. On the educational side, the EIMS course curriculum is being updated to include new educational modules on exercise in the elderly, disabled, and for women's health as well as for common musculoskeletal injuries. Feel free to contact us at admin@eims.sg if you have ideas and suggestions as we continue to grow EIMS educational, public outreach, and research efforts!

EIMS 2014 COURSE SCHEDULE Q4

Exercise Prescription Course for Primary Care Physicians Course

11 & 18 Oct 2014
(Saturday) 12 pm to 6 pm

Clinical Fitness Professionals' Course

10 & 11 Nov 2014
(Monday & Tuesday) 9 am to 6 pm

If you have not signed up for our courses yet, don't miss our last intake for this year!
To register, visit www.eims.sg.

AN ACTIVE LIFE ON WHEELS

By Lauren Kelly Lewis

Most people are well aware of the benefits that regular exercise can provide. Besides helping us stay fit, lose weight and avoid a number of preventable diseases, exercise also reduces stress and improves our mood and energy levels.

Despite these numerous benefits, many people are choosing not to exercise. Commonly cited reasons include lack of time, motivation, energy, or lack of access to exercise equipment or facilities.

Wheelchair users are even more likely to lead a sedentary lifestyle and not engage in physical activity due to a number of barriers, even though they need exercise to maintain their health and prevent chronic disease. According to Changi General Hospital physiotherapist Laura Smith, common barriers wheelchair users face include not knowing what exercises they can do or how to do them, feeling self-conscious when exercising, not having easy access to a wheelchair-friendly gym, and feeling tired or fatigued before or after exercises.

Without exercise, wheelchair users have a risk of developing normally preventable diseases such as diabetes type II, hypertension, and cardiovascular disease at rates even higher than that of the general population. Fortunately, with just a few adaptations, exercise is 100% possible and recommended for most wheelchair users. Furthermore, many opportunities exist for wheelchair users who are looking to become involved in sports as a form of exercise. The Singapore Disability Sports Council is a great resource for wheelchair users looking to start a competitive sport or team activity.

"The benefits of exercise are not restricted to people who have full mobility," Ms. Smith states. Exercise is meant for everyone: the physical, mental, and emotional benefits of exercise can be acquired regardless of one's capabilities, provided that one has proper instruction and the willpower.

A few examples of exercises that most wheelchair users can do to start getting active and take control of their health are demonstrated below. Before starting an exercise program, talk to your doctor to make sure you don't have any medical conditions that may limit the amount and type of exercise you can perform.

Exercises

Flexibility

Stretching of major muscle groups should be performed at least once a day to loosen stiff or painful muscles and joints and improve range of motion.

To stretch your chest (pectoralis muscles), upper back, and shoulder muscles, place your forearm against a wall corner with your elbow bent at about 90 degrees. Lean forward and gently apply pressure to the arm against the wall until you feel the stretch with some slight tightness. Hold for about 30 seconds, then repeat the stretch with your other arm.

To stretch your posterior thigh (hamstring) muscles, raise your leg and rest your heel on the seat of a chair positioned directly in front of your wheelchair. Extend your arm in front of you and reach forward towards your raised foot until you feel the stretch along the back of your thigh. Hold for about 30 seconds, then repeat the stretch with your other leg.

Aerobic

Aerobic exercise helps to increase your heart rate and improve your cardiorespiratory fitness, reducing your risk of heart and blood vessel disease.

Marching in place is one example of an aerobic exercise that can be performed while in a wheelchair. Put on sneakers or shoes with enough foot support, then march in place by alternatively lifting and placing each foot down at a brisk pace. You can raise your arm along with the opposite leg to increase effort. Marching in place helps to build your thigh muscles which support your knee joint, both of which make it easier to get in and out of a wheelchair.

Strength

Strength exercises such as one-arm dumbbell rows can preserve and build muscle and bone strength that is normally lost with age or underuse.

To perform a seated one-arm dumbbell row, lean forward in your wheelchair and extend your arm towards the ground, holding a dumbbell weight with your palm facing in towards your body. Pull your arm up until your upper arm is pulled back and in line/parallel with the floor, and your hand is nearly touching your ribcage. Aim to complete 8-12 reps with each arm. This exercise can be performed following the same steps without weight, or with a dumbbell substitute such as a food can or filled water bottle.

Pictures provided by Laura Jane Smith
Senior Physiotherapist, Changi General Hospital

Before starting an exercise program, talk to your doctor to make sure you do not have any medical conditions that may limit the amount and type of exercise you can perform. Through EIMS, patients can receive support from an EIMS-certified physician and clinical fitness professional to prescribe a treatment comprising of safe and effective physical activity that they can perform at home or in a gym, according to their health needs.

FORUMS & CONFERENCES

Update on Exercise is Medicine SEA
1st Southeast Asia Regional Meeting for Exercise Is Medicine in Kuala Lumpur, Malaysia
Dr Benedict Tan & Dr Fadzil Hamzah*, 17 March 2014*

Exercise is Medicine
50Plus Expo, hosted by Council for Third Age (C3A)
Dr Ivy Lim & Ms Shamsynar Ani*, 28 to 30 March 2014*

Putting EIM® into Practice Around the World
2014 ACSM Annual Meeting in Orlando, FL
Dr Benedict Tan*, 27-31 May 2014*

EIM Continuing Medical Education Training
2014 ACSM Annual Meeting in Orlando, FL
Dr Ivy Lim*, 27-31 May 2014*

Update on Exercise Is Medicine Singapore Activities
5th Annual EIM World Congress
Dr Benedict Tan & Dr Ivy Lim*, 27-31 May 2014*

PUBLIC
OUTREACH
ACTIVITIES FOR THE FIRST HALF OF THE YEAR IN SUMMARY

Opening of Fitness Corner at Simei Park Connector

On the morning of 29 March 2014, Ms Jessica Tan Soon Neo, Member of Parliament for East Coast GRC (Changi Simei), officially opened the first EIMS-compliant fitness corner at Simei Park Connector. Featuring educational boards that allow users to tailor their workouts, the fitness corner was developed in consultation with EIMS, and in collaboration with Coca-Cola Singapore and National Parks Board (NParks).

Residents are now able to enjoy exercising using a variety of equipment including parallel bars, chin-up bars, and steps, cater to a broad spectrum of users, from the physically fit to those with chronic diseases.

As a continuous effort to encourage Singaporeans to exercise, EIMS-certified fitness professionals were at the fitness corner on the last Sunday of every month, from March till July, to guide users on the use of equipment and provide specialized fitness advice for those with chronic diseases.

50Plus Expo 2014

During that same weekend of 28 to 30 March 2014, EIMS was also at the 50Plus Expo. Hosted by Council for Third Age C3A, EIMS shared with visitors who visited our exhibition booth ways to incorporate exercise into their treatment plan, as well as recommending them to visit one of our EIMS-certified doctors and fitness professionals to discuss physical activity as part of disease prevention and management strategy. Dr Ivy Lim, Registrar, Changi Sports Medicine Centre, together with Ms Shamsynar Ani, Senior Physiotherapist, conducted a forum talk on the topic, "Exercise is Medicine" as well. The event saw 80,811 visitors and 165 participating companies over 3 days.

WHAT IS THE POINT IN EXERCISING?

I CAN'T MEET THE GUIDELINES!

Dr Ivy Lim

National guidelines have recommended 150 minutes of moderate intensity aerobic exercise per week, or 75 min of vigorous intensity exercise, or a mixture of both. However, Wen et al[1] note that a large proportion of the global population remains sedentary, with numbers ranging from 40% to 80%. In Singapore, results of the 2010 National Health Survey showed that 54% of the population did not exercise at all! It has been postulated that the standard has been perceived as being too high, and deterred many people from even trying. However, it is important to relay to the sedentary group that 'some exercise is better than none'. Various studies have shown that even short durations of exercise can be beneficial.

Lee et al[2] have found that running just 5 to 10 minutes a day was associated with 30% less mortality from all causes, and 45% less mortality from cardiovascular disease, even at slow speeds of less than 6 miles per hour, or 9.6km per hour. Wen et al[3] also showed that even 15 minutes a day of brisk walking is associated with 14% less mortality.

In terms of intensity, higher-intensity exercise has shown to be more beneficial than lower-intensity exercise, with a 5 minute run as effective as a 15 minute walk in reducing mortality. However, one must remember that higher-intensity exercise is often associated with more injuries, and that the sedentary population is less likely to tolerate exercise of a higher intensity. Thus, the decision in getting your patient or client to walk or run as a form of exercise, will have to depend on many factors, such as fitness level, personal preference, and time available.

Always remember, the most effective exercise is neither the most intense nor the longest one, but the one that the individual can keep doing.

References

1 *Wen et al. Minimal Amount of Exercise to Prolong Life. J Am Coll Cardiol 2014; 64(5): 482-484.*

2 *Lee et al. Leisure-Time Running Reduces All-Cause and Cardiovascular Mortality Risk. J Am Coll Cardiol 2014; 64(5): 472-481.*

3 *Wen et al. Minimum Amount of Physical Activity for Reduced Mortality and Extended Life Expectancy: a Prospective Cohort Study. Lancet 2011; 378(9798): 1244-1253.*

UPDATES FROM EIM GLOBAL HEADQUARTERS

By Dr Mark Stoutenberg

We just held the 5th Annual EIM World Congress at the 2014 ACSM Annual Meeting in Orlando, FL, that was attended by EIM representatives from 24 countries, including both Drs. Benedict Tan and Ivy Lim on behalf of Singapore. Dr. Tan gave a lecture "Making the Case for EIM in Asia" at the international symposium entitled "Putting EIM® into Practice Around the World." Dr. Lim presented in the symposium on the global growth of EIM Continuing Medical Education Training.

At the Global Center, efforts are underway to standardize global CME training, based largely off of the Singapore model. There are also plans to launch the EIM on Campus initiative to get campuses more involved with EIM. We see a university campus as a microcosm of the larger society – there are health and wellness resources, health care professionals and systems, and plenty of trained and training health and fitness professionals. The EIM on Campus program seeks to link all of these great campus resources together.

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