

KUCHING LIGHTS UP RED

CHILDHOOD OBESITY :

*Intervention through
Physical Activity*

First part of final report on p.4-5

*16 Tips to lower your
cholesterol*

p.9-11

Health Awareness Day @
Kampung Tebedu Rawang p.8

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CONTENTS

Editor's Message	2
Light Up Red	3
Understanding Our Children's Physical Activity Status And Its Relationship To Motor Skills	4-5
World Heart Day	6-7
Health Awareness Day @ Kampung Tebedu Rawang	8
16 Tips to lower your cholesterol	9-11

EDITOR'S MESSAGE

If there is one milestone in 2018 that we can single out as most pleasing for the Sarawak Heart Foundation, it has to be the Light up Red of two iconic landmarks - Jambatan Darul Hana and Fort Margherita - in Kuching on World Heart Day. That has put Sarawak on the world map as the State joins the global campaign in raising public awareness of heart disease together with 80 illuminations in other parts of the world.



The Foundation plans to call on more institutions and companies to light up red their premises in support of the fight against cardiovascular disease for World Heart Day 2019.

We are as pleased to report the findings of the Foundation-sponsored research carried out by Universiti Malaysia Sarawak on obesity among pre-school children following the recent increase trend in childhood obesity among pre-school children. The study - Childhood Obesity: Intervention through Physical Activity - measured motor skills and physical activity outcome from a school-based intervention programme among rural pre-school children in Bau District over a 12-week period. The first half of the report is on Pages 4 and 5.

2018 also saw the introduction of our heart awareness programme in Mukah and Kapit with the collaboration of the State Health Department. Throughout the year, we had Sarawak Heart Centre as our faithful partner in all our free health screenings including self breast examination.

Our heartfelt appreciation goes to the many donors, both corporate and individual, and volunteers who were always there for us.

We look forward to having another happening year of educating the people of Sarawak about heart health and complementing government efforts in helping poor heart patients.

Leading a healthy lifestyle is a choice. Choose to eat healthily and exercise regularly. Why not include in our resolutions for the year - to take ownership of our health and make positive changes in our lifestyles.

Our warm wishes for a happy and healthy 2019.

Eric Lim Swee Khoon

Sarawak Heart Foundation • Member of World Heart Federation



LIGHT UP RED

Jambatan Darul Hana and Fort Margherita, two iconic landmarks in the heart of Kuching, lit up in red for the first time to celebrate World Heart Day on 29 September 2018. It was, indeed, a beautiful sight to behold, but more so, it was to raise awareness of the world's number one killer - cardiovascular disease.

The light up red was made possible with the cooperation of Commission of the City of Kuching North and Sarawak Economic Development Corporation.

Jambatan Darul Hana and Fort Margherita were among 80 illuminations in red across the world that evening on World Heart Day.

We look forward to seeing more landmarks light up in Kuching next year.



UNDERSTANDING OUR CHILDREN'S PHYSICAL ACTIVITY STATUS AND ITS RELATIONSHIP TO MOTOR SKILLS

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RESEARCH PROGRESS

EFFECTIVENESS OF PHYSICAL ACTIVITY INTERVENTION FOR RURAL PRE-SCHOOLERS IN KUCHING, SARAWAK

Melvin Chung H.L., Cheah Whye Lian, Helmy Hazmi

1.0 Executive Summary

Childhood obesity has been growing at an alarming rate and is the most common nutritional problem among children (WHO, 2000). Several reports already showed high and increasing rates of overweight and obesity among preschool children living in developing countries (de Onis & Blössner, 2000). The most common causes are lack of physical activity, unhealthy eating patterns, high level of inactivity or sedentary behaviour, genetic factors, or a combination of these factors.

Traditionally, it is known that early childhood period has the highest levels of physical activity. Young children are naturally physically active or usually known as "supercharged dynamos". Society usually have the


CHILDHOOD OBESITY: Intervention through Physical Activity

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Introduction

Childhood obesity has been growing at an alarming rate and is the most common nutritional problem among children (WHO, 2000). Several reports already showed high and increasing rates of overweight and obesity among preschool children living in developing countries (de Onis & Blössner, 2000). The most common causes are lack of physical activity, unhealthy eating patterns, high level of inactivity or sedentary behaviour, genetic factors, or a combination of these factors.

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The photograph showing off for health screening

Heart Talk Volume 15 - June 2017

Heart Talk Volume 17 - June 2018

Introduction

Traditionally, it is known that early childhood period has the highest levels of physical activity. Young children are naturally physically active or usually known as "supercharged dynamos". Society usually has the perception that children at this period are habitually "active enough" and therefore, quite healthy. However, parents, healthcare providers and educational professionals could have overestimated their level of physical activity. Besides, with the advancement of technology and social media, it is worrying that the "digital childhood" begins early and levels of sedentary behaviour particularly screen time or electronic media used exceeded recommended levels.

Several researchers have suggested that this can be related to the children's MS performance (Okely et al., 2001; Wrotniak et al., 2006; Raudsepp and Päll, 2006). Graf et al.(2004) had reported that children with higher levels of MS performance tend to be more physically active than children with less well-developed MS.

A cross-sectional study which involved 153 children from government kindergartens in Bau District was carried out early 2017. The Test of Gross Motor Development (TGMD) version 2 (Ulrich, 2000) was used to assess six locomotor and six object control standard scores as well as determine a gross motor quotient (GMQ). PA levels were assessed using a Yamax Digi-Walker CW-70 (Tokyo, Japan) pedometer during all waking hours of six consecutive days, including two weekend days, and only to remove the device during water-based activities and during sleeping. This study objective is to determine PA and MS among the preschool children in rural Sarawak.

A total of 153 respondents participated in this study with the mean age of 4.5 years \pm 0.50 as depicted in Table 1.

They were about equal numbers, 83 (54.2%) to 70 (45.8%), of males and females respondents. Most of the male respondents had a mean of height of 105.3 cm \pm 6.85 while the female respondents with the mean of height of 104.4cm \pm 6.50. The overall weight for these respondents was 19.1kg \pm 6.28 with male and female respondents respectively 19.5kg \pm 6.37 and 18.6kg \pm 6.19. With that, it gave them an overall Body Mass Index (BMI) of 17.0 \pm 4.05. From this study, about 52.9% of the respondents had normal BMI, 19.6% underweight and 27.5% overweight. Besides, the results reported that the gross MS mean score was 104.4 \pm 16.75. Majority of the respondents had gross MS score more than 90. For their PA level using step counts, it is found that the average step counts are 10110.7 \pm 1439.65. More than half of the respondents had more than 7500 steps count, only 3.3% of the respondents had step count of less than 7500.

Table 1 : Nutritional profile, MS scores and PA level of respondents (N=153).

Characteristic	n (%)	Overall Mean (SD)
Respondent		
Male	83(54.2)	
Female	70 (45.8)	
Age (years)		4.5 (0.50)
4	75 (49.0)	
5	78 (51.0)	
Height (cm)		104.9 (6.68)
< 100	31 (20.3)	
100 – 119	116 (75.8)	
>=120	4 (2.6)	
Weight (kg)		19.1 (6.28)
< 16	54 (35.3)	
16 – 30	79 (51.6)	
>30	14 (9.2)	
BMI – age		17.0 (4.05)
Underweight	30 (19.6)	
Normal	81 (52.9)	
Overweight / Obese	42 (27.5)	
Gross MS Score		104.4 (16.75)
< 90	40 (26.1)	
90 – 110	56 (36.6)	
>111	57 (37.3)	
Physical Activity Level (Step counts)		10110.7 (1439.65)
< 7500	5 (3.3)	
7500 – 9999	70 (45.8)	
>= 10000	78(51.0)	

Based on the current study, the findings revealed that boys had higher PA level (59.0%) compared with the girls (41.4%). The finding is consistent with previous studies using objective measures of total physical activities among school children, whereby girls are less physically active than boys (Hallal et al., 2012; Telford et al., 2016). One of the reasons that lower PA level were observed among girls were



Health screening for Pre-schoolers in Bau District

associated with weaker influences at the school and family levels and through lower participation in extracurricular sport. Besides, those who were non obese (60.4%) have higher PA level compared with those whose BMI level were categorised as obese. In this study, it is shown that non obese preschool children are 4.271 times more active than obese children, and it can be conceptualised that weight status are inversely related to PA. However, there are other studies that reported no significant association between PA and overweight status. This could be due to the validity and reliability of the PA level measured for the children. Therefore, the discrepancy of the current findings with the studies reported previously can be explained by the research tools and protocol involved, differences in the definition of obesity and the length of the monitoring period.

The present study also suggests that, the higher the gross MS score, the higher the PA level. For example, 63.7% of the respondents with moderate to high gross MS score tend to be more active compared to those with low gross MS score. This means that children with more developed MS find it easier to learn specialised sports skills, are physically active and involved in wider range of physical activities compared to those children with lower MS. With that, it can be concluded that most of the studies revealed that MS is an important means to promote PA.

Generally, in this cohort, results of this study could provide a valuable information to monitor the trend in PA and MS in Bau district. Factors such as gender, body weight status, fundamental movement skills play a crucial role in engaging physical activities. All these factors are an important prerequisite to design effective intervention strategies which operate on multiple levels of socio-ecological framework, particularly in primary school-based settings where boys and girls are taught physical education together.

Acknowledgments

We thank the Sarawak Community Development Department (Jabatan Kemajuan Masyarakat Negeri Sarawak), Malaysia Ministry of Rural Development and all the preschool teachers for assisting us in the assessments.

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Health talk on Childhood Obesity in Dewan Suarah Bau



Pre-schoolers queuing up for health screening



Implementation of physical activity intervention programme in Tabika KEMAS, Bau



Pre-schoolers from Tabika KEMAS, Bau

A research funded by Sarawak Heart Foundation.



MY HEART YOUR HEART

..... is about saying to ourselves, the people we care about and individuals all around the world, "What can I do right now to look after my heart and your heart?"

It is about celebrating and connecting like-minded people. Everyone is to make a promise – a promise as an individual to get more active, say no to smoking and eat more healthily.

With this theme, Sarawak Heart Foundation chairman, Tuan Yang Terutama Yang di-Pertua Negeri Sarawak, Tun Pehin Sri Haji Abdul Taib Mahmud launched World Heart Day 2018 at Saradise Kuching on 23 September.

And Nestle Omega Plus was with us again as the sponsor for the "Walk-A-Mile" that saw more than 2000 participants coming together for the event. Though there were no winners in the Walk-A-Mile, there was a happy lot who walked away from the lucky draw with attractive prizes, all which were sponsored.

The Foundation also introduced Walk-A-Mile++ which means an extra mile, to add spice to the event, so to speak.







Health Awareness Day



@
Dewan Terbuka
Kampung Tebedu Mawang, Serian
Saturday 1 December 2018 9am~12noon

Free Health Screening

- ♥ Body Mass Index
- ♥ Blood Sugar
- ♥ Blood Pressure
- ♥ Cholesterol
- ♥ Counselling
- Free Self Breast Examination





16 Tips

To lower your cholesterol

SIMPLE STEPS ADD UP

Has your doctor said you have high cholesterol? Then you know you need to change your diet and lifestyle to lower cholesterol and your chance of getting heart disease. Even if you get a prescription for a cholesterol drug to help, you'll still need to change your diet and become more active for heart health. Start with these steps.

KNOW GOOD AND BAD

Your body needs a small amount of cholesterol. But many people have too much, especially the “bad” kind, or LDL cholesterol. That can happen if you eat too much saturated fat, found mainly in foods from animals. If your LDL level is too high, plaque can build up in your heart’s arteries and lead to heart disease. The “good” cholesterol, HDL, helps clear LDL from your blood.



USE YOUR HANDS

It’s easy to eat too much, especially when you eat out and the portions are huge. That can lead to weight gain and higher cholesterol. What’s a true portion? There’s a “handy” way to tell. One serving of meat or fish is about what fits in your palm. One serving of fresh fruit is about the size of your fist. And a snack of nuts or serving of cooked vegetables, rice, or pasta should fit in your cupped hand.

THINK DELICIOUS AND NUTRITIOUS

Load your plate with fruits and vegetables -- aim for five to nine servings each day -- to bring down your LDL level. Antioxidants in these foods may provide the benefit, along with fiber. And you may eat less fatty food if you fill up on produce. Bonus: You’ll also help lower blood pressure and keep your weight in check.



BOOST YOUR OMEGA-3S

You can eat fish twice a week. It’s a great source of protein and omega-3s, which are a type of fat your body needs. Omega-3s help lower levels of triglycerides, a type of fat in the blood. They may also cut down on cholesterol, slowing the growth of plaque in arteries. Go for fatty fish, such as salmon, tuna, trout, and sardines. Grill, roast, bake, or broil, but don’t fry them.

START YOUR DAY WITH WHOLE GRAINS

A bowl of oatmeal is a smart choice. It fills you up, making it easier not to overeat at lunch. The fiber also curbs LDL cholesterol. Whole grains aren't just for breakfast. You've got plenty of options to try later in the day, such as brown or wild rice, popcorn, and barley.



GO NUTS

Need a snack? A handful of almonds, pecans, pistachios, walnuts, or other nuts is a tasty treat. They are high in monounsaturated fat, which lowers LDL "bad" cholesterol but leaves HDL "good" cholesterol alone. Studies show that people who eat about an ounce of nuts a day are less likely to get heart disease. Keep the portion small, so you limit fat and calories. And avoid those covered in sugar, chocolate, or a lot of salt.



MAKE IT UNSATURATED

You need some fat in your diet, but probably less than you think. Plus, the type of fat matters. Unsaturated fats -- like those found in canola, olive, and safflower oils -- lower LDL "bad" cholesterol levels and may help raise HDL "good" cholesterol. Saturated fats -- like those found in meat, full-fat dairy, butter, and palm oil -- raise LDL cholesterol. Remember, good fats have just as many calories, so use just a bit.



PICK THE BEST CARBS

Beans and whole grains such as brown rice, quinoa, and whole wheat have more fiber and don't spike your blood sugar. They will lower cholesterol and make you feel full longer. Other carbs, like those found in white bread, white potatoes, white rice, and pastries, boost blood sugar levels more quickly so you feel hungry sooner, which can lead you to overeat.



GO FOR 30

Just half an hour of physical activity 5 days a week can lower your bad and raise your good cholesterol levels. More exercise is even better. Being active also helps you reach and keep a healthy weight, which cuts your chance of developing clogged arteries. You don't have to exercise for 30 minutes straight. You can break it up into 10-minute sessions. Or go for 20 minutes of harder exercise, like running, three times a week.



WALK IT OFF

It's simple, convenient, and all you need is a good pair of shoes. Aerobic exercise ("cardio") such as brisk walking lowers the chance of stroke and heart disease, helps you lose weight, keeps bones strong, and is great for your mood and stress management. If you're not active now, start with a 10-minute walk and build up from there.



GO BEYOND THE GYM

You can be active anywhere. Garden, play with your kids, hike, dance, walk your dog -- if you're moving, it's good! Even housework goes on the list if it gets your heart rate up. Do as much as possible, as often as you can, wherever your day takes you.



BE SMART WHEN YOU EAT OUT

Restaurant food can be loaded with saturated fat, calories, and sodium. Even "healthy" choices may come in supersize portions. To stay on track:

- Choose broiled, baked, steamed, and grilled foods -- not fried.
- Get sauces on the side.
- Ask for half of your meal to be boxed up before you get it.

CHECK THE LABEL

What's the serving size? The nutrition info may look good, but does the package contain two servings instead of one?

If it says "whole grain," read the ingredients. Whole wheat or whole grain should be the first one.

Note the saturated fat, sodium, calories, and cholesterol. Are they OK for your daily plan? If not, what will you choose to change?



STAY CHILL

Over time, out-of-control stress becomes a problem. It raises your blood pressure, and for some people, it might mean higher cholesterol levels. Make it a priority to relax. It can be as simple as taking some slow, deep breaths. You can also meditate, pray, socialize with people you enjoy, and exercise. And if some of the things that stress you out are things you can change, go for it!

CHECK YOUR WEIGHT

Extra pounds make you more likely to get high cholesterol, high blood pressure, and type 2 diabetes. These all affect the lining of your arteries, making them more likely to collect plaque from cholesterol. Losing weight, especially belly fat, raises your good and lowers your bad cholesterol.



KEEP TABS

Celebrate your progress! Remember that you're in charge of your health and that you can turn your cholesterol around. See your doctor regularly so you know how it's going. Working together, you'll keep your heart going strong.



SARAWAK HEART FOUNDATION
(383498-P)

"FRIENDS OF THE FOUNDATION" FORM

WE NEED YOUR HELP?

Join our team to promote a heart-healthy community in Sarawak. We need people who are keen to share their skills and interests.

Areas that you can help us in include:-

- >>Fund raising
- >>Website design and maintenance
- >>Photography
- >>Venue preparation
- >>Health Screening
- >>Health Talk

Full Name Address Mobile Phone Email : Date	Help us to get to know you by telling us your skills and interests
------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------

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SARAWAK HEART FOUNDATION
(383498-P)

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[] **Direct Remittance** : Our Bank details
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 Bank : **RHB Bank**
 A/C No. : **21104350033342** (Please fax or email the bank-in slip to us)

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