INA-RESPOND

INDONESIA RESEARCH PARTNERSHIP ON INFECTIOUS DISEASE

KEMENTERIAN KESEHATAN REPUBLIK INDONESIA

NEWSLETTER

September 2018

BE FIT AND DYNAMIC

LEAVING YOUR SEDENTARY LIFESTYLE

Free Marketing for A Free Software

PROTOCOL DEVIATION: EMBARRASSING OR ACCEPTABLE?

HIV Integrase Strand Transferase Inhibitors : Part 2

NATIONAL INSTITUTE OF HEALTH RESEARCH AND DEVELOPMENT
MINISTRY OF HEALTH REPUBLIC OF INDONESIA
2018

INA-RESPOND Network Secretariat

@The Rooftop of Building 4

Badan Penelitian dan Pengembangan Kesehatan,

Republik Indonesia,

Jakarta

INA-RESPOND newsletter

content

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FEATURES

MASTHEAD

INA-RESPOND Secretariat

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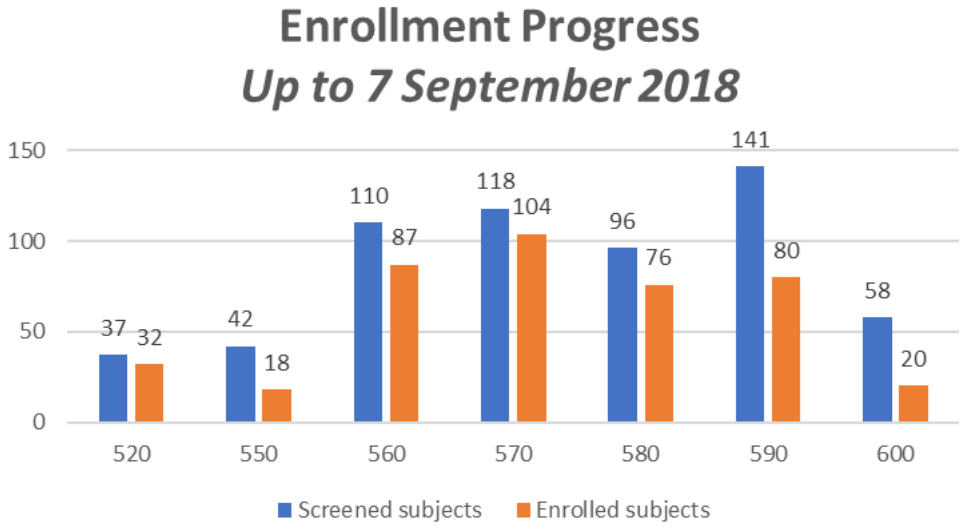
INA-RESPOND Newsletter

TRIPOD & INA-PROACTIVE Study Updates

By: ANANDIKA PAWITRI, LOIS E. BANG, M. IKHSAN JUFRI, VENTY MULIANA SARI

INA102 Screening and Enrolment

Up to 7 September 2018, all 7 sites have enrolled a total of 417 subjects. The sites enrolled 70 % of the screened patients (417 enrolled subjects from 602 screened patients).



Specimen Shipping Report

Since the activation of the first site, we have encouraged sites to send the study specimens to our reference laboratory every month. We thank all sites that comply to the recommendation. This helps us a lot with the documentation and in keeping the specimen in the most optimal condition. Sometimes the specimen cannot be sent on time due to technical circumstances, but we work our best to be punctual according to the schedule.

Sites updates

Regarding to the previous updates about the enrolment target, why is it important that we strive to meet it? Under-enrolment in research study will affect significant aspects on a number of level, for all stakeholders-sites, sponsors, and patients. Several of the consequences include: ethical implication; missed opportunities for patients; decreased scientific validity; and wasted time, resources, and funds.

Site	Specimen Shipping to Laboratory Reference																
	2017								2018								
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
520																	
550	*The site is not yet active*																
560																	
570																	
580																	
590	*The site is not yet active*																
600	*The site is not yet active*																

Table 1. Specimen shipping from all site

INA104

By September 15, 2018, a total of 11 sites (shown on figure 1) had actively recruited patients. Site 580 (Sardjito Hospital) is the latest recruited site of this month. A total of 621 out of 954 patients have been enrolled consisting of 31 pediatrics and 590 adults. Enrollment failure rate was 34,9% from total screenings due to the following reasons:

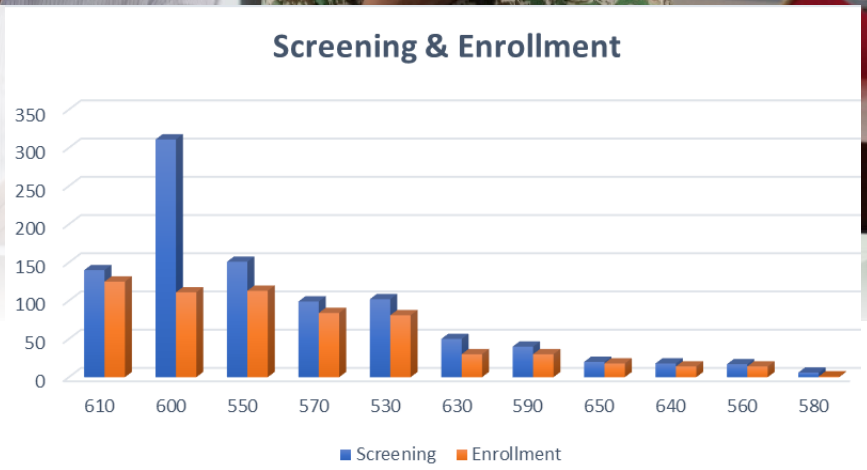


Figure 1. Enrolment Number from Sites

Site Visits Schedule

1. 1st Site Monitoring Visit to RSUP Kariadi on 17-18 September 2018

2. 1st Site Monitoring Visit to St. Carolus Hospital on 24-25 September 2018

3. 2nd Site Monitoring Visit to RSUP Wahidin Sudirohusodo on 24-27 September 2018

For site activation progress, we are still looking forward to the activation of site 660 (Wahab Sjahranie Hospital, Samarinda) which will be activated by the end of this month. This site is now close to final preparation. We hope that it could be activated by next week and become the 12th activated site.

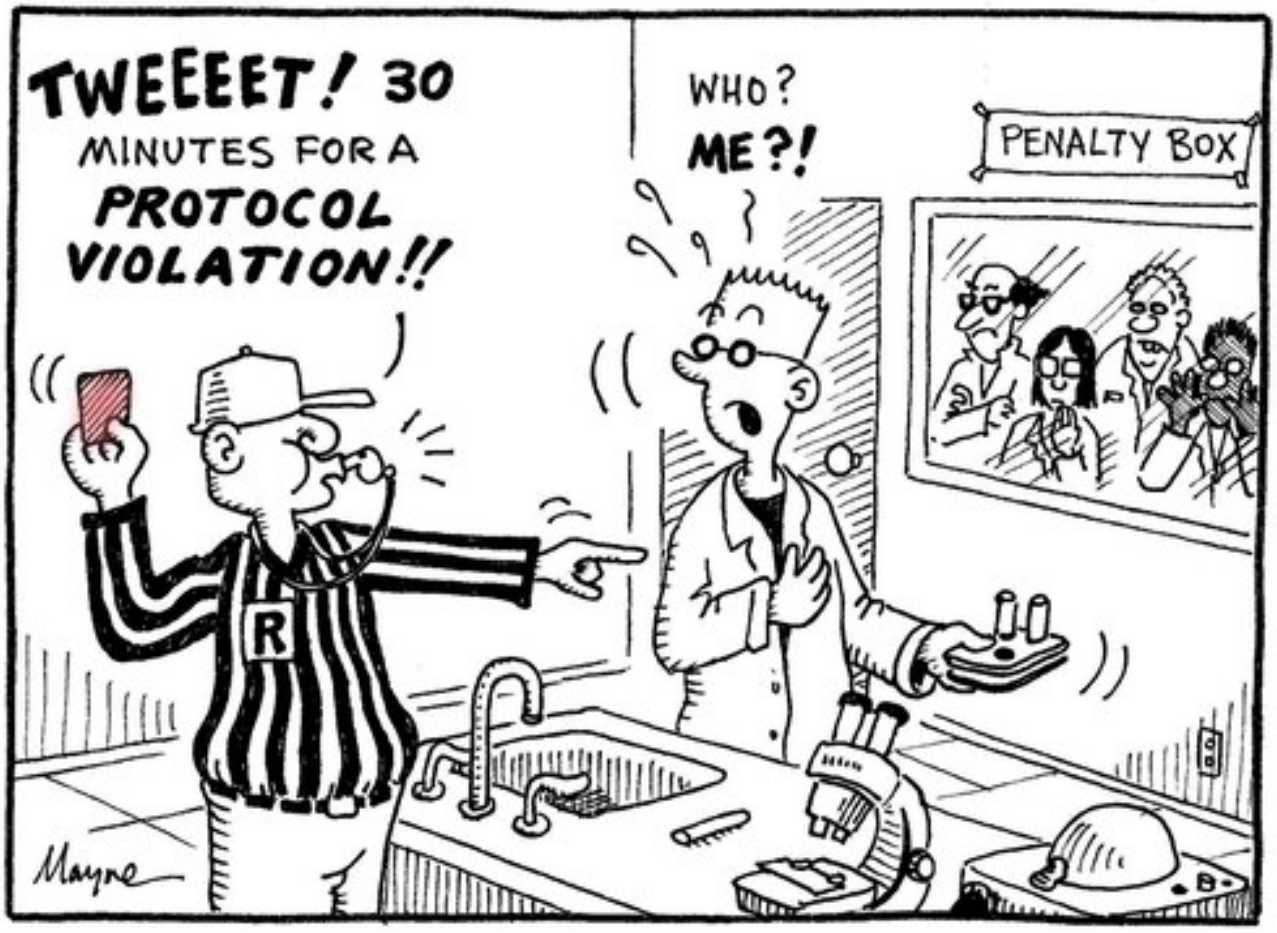
We also have some updates on site agreement. There are 2 sites which have recently signed the agreement for PROACTIVE study: site 540 (RSPI Sulianti Saroso) and site 520 (Sanglah Hospital). Site Specialists are now preparing the site team and trying to complete all the essential documents.

Reason	610	600	550	530	570	630	590	650	640	560	580	Total
HIV negative	-	-	1	-	-	1	-	-	-	-	-	2
Refuse to consent	2	-	1	1	4	-	1	-	-	-	-	9
Unwilling to comply with the study procedures	-	15	-	1	3	-	-	-	-	2	-	21
Plans to move away	-	7	2	4	-	1	2	-	2	-	-	18
Others:	13	178	34	15	8	18	7	2	2	1	5	283
A. No show	2	176	9	10	4	8	7	-	1	1	-	218
B. Busy (in a hurry)	11	2	13	4	4	3	-	2	1	-	5	45
C. Not cooperative	-	-	1	-	-	-	-	-	-	-	-	1
D. Has been enrolled	-	-	8	-	-	1	-	-	-	-	-	9
E. Unwell	-	-	1	-	-	-	-	-	-	-	-	1
F. No referral letter from others health facilities	-	-	-	1	-	-	-	-	-	-	-	1
G. Equipment trouble	-	-	-	-	-	6	-	-	-	-	-	6
F. Recommend to hopitalized/hospitalized	-	-	2	-	-	-	-	-	-	-	-	2

INA-RESPOND Newsletter

Is Protocol Deviation An Embarrassing Thing?

By: ANANDIKA PAWITRI, LOIS EIRENE BANG, MILA ERASTUTI,



Is Protocol Deviation An Embarrassing Thing?

The answer is Yes and No. Let's discuss it! When you are conducting a clinical trial / study, you most likely have heard the term "protocol deviation" . Protocol deviation is an action of departing from an established course or accepted standard; in this case, the study protocol. Our network divides protocol deviations into two categories: minor protocol deviation and major protocol deviation. A deviation becomes major when it has serious impacts on the subject's rights, safety, or well-being; and / or greatly affects the completeness, accuracy, and reliability of the study data. Therefore, when a major protocol deviation is reported, Research Assistant (RA) must inform INA-RESPOND Secretariat within 24 hours after knowing about it, and it should be reported to NIHRD IRB and/or Local IRB in accordance with their requirements.

When is protocol deviation a perfectly okay thing?

A protocol deviation is considered OK when it happens beyond the control of the investigator and cannot be avoided. For example, the participant dies before RAs can

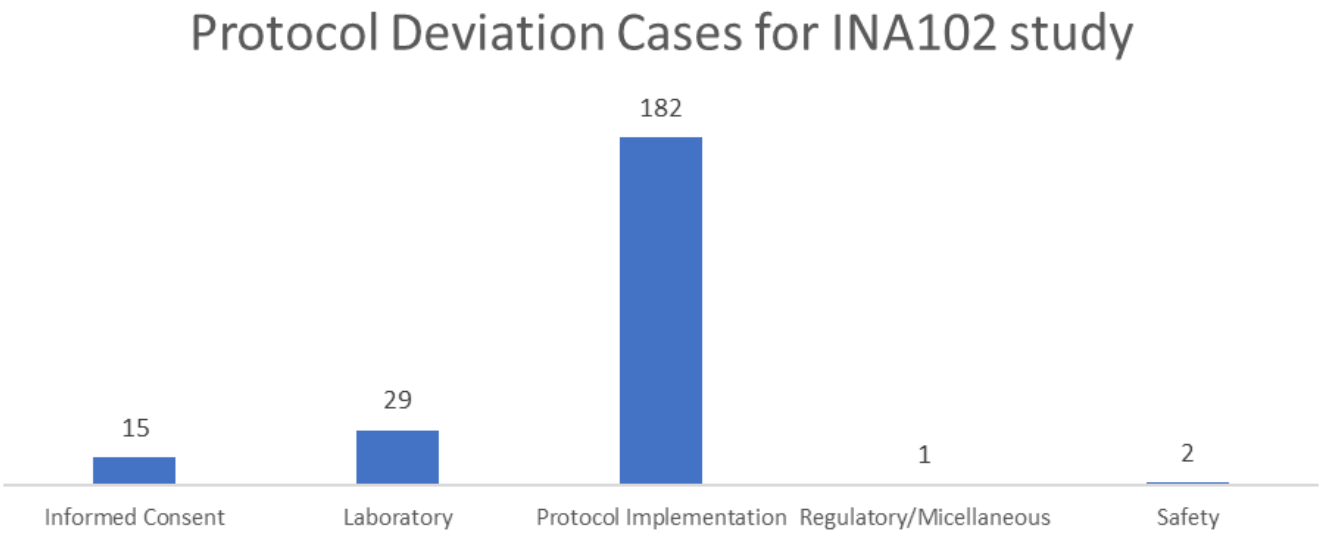


Figure1. Deviation of protocol implementation has the highest cases.

collect any specimen during baseline and enrollment visit or the participant is travelling abroad so she/he cannot come to the clinic for the scheduled visits even though RAs have set up an appointment with the participant.

But it is quite an issue when the event could have been avoided.

On the other hand, a protocol deviation may happen when the study team are not well-organized or paying attention to the protocol. For example, RAs forget to sign the Informed Consent Form before the enrollment, enroll ineligible patients, or collect samples more than required by the protocol. These kinds of deviation should be reported as major protocol deviations. Note that the more protocol deviation findings there is in a monitoring visit, the greater they may impact the site's performance. They show the study team's ignorance related to the study protocol and procedures.

Let's jump right in!

What are the most common findings of protocol deviation in INA-RESPOND TRIPOD study?

Apparently, a lot of deviation cases happen under protocol implementation categories. There are four events recorded under this category: (1) performing a procedure not stated in the approved protocol; (2) performing a procedure not authorized in the informed consent; (3) withdrawn criteria were met, but participant was not withdrawn; and (4) missed procedure/assessment might be reported as a minor protocol deviation. Interestingly, 95% of them are missed procedure/assessment of the protocol. What happen? As I mentioned above, sometimes the circumstances will not let us comply with the protocol. It is just inevitable. But, are these deviations really unavoidable?

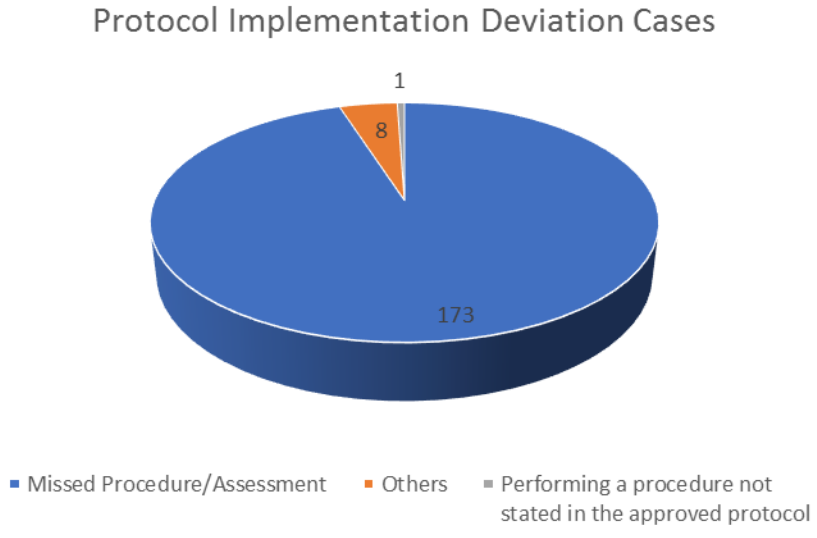


Figure2. Missed procedure/assessment is the highest events under protocol implementation category.

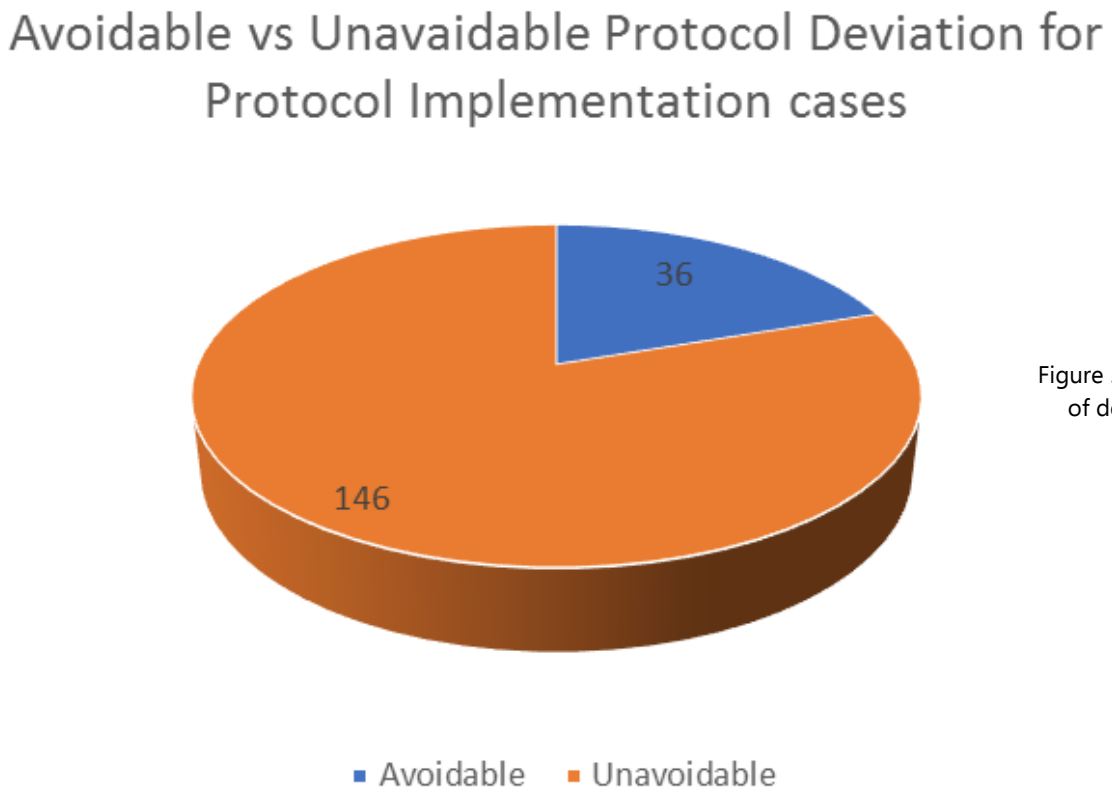


Figure 3. 20% cases of deviations are avoidable.

As we can see from the chart, nearly 20% of the cases can actually be avoided. Site team members are not the only ones responsible for these events. People who organize the study are also responsible in escorting site team to comply with the protocol.

FDA compliance the 21 CFR 312.56 (b) – "Sponsor who discovers that an investigator is not complying with the signed agreement general investigational plan or the requirements of this part or other applicable parts shall promptly secure compliance…", Guidance for Industry: Investigator Responsibilities – Protecting the Rights, Safety and Welfare of Study Subjects – "There are occasions when a failure to comply with the protocol may be considered a failure to protect the rights, safety and welfare of subjects because the non-compliance exposes subjects to unreasonable risk. Investigators should seek to minimize such risks by adhering closely to the study protocol."

Protocol deviation trend could give a trigger to a protocol amendment.

For example, missed assessment for none of blood collection in visit 3 months after enrollment for pediatrics participant shows that collecting blood sample for pediatrics participant is not realistic or feasible, so it could be removed from the protocol.

Rather than feeling ashamed or embarrassed, creating the Corrective Action and Preventive Action (CAPA) would be a perfect response. Refer to ICH GCP 5.18.4q, "*communicating deviations from the protocol, SOPs, GCP, and the applicable regulatory requirements to the investigator and taking appropriate action designed to prevent the recurrence of the detected deviations*."

Our awareness of the study protocol and procedure should be high. actively reporting PD and implementing CAPA prior to the monitoring visit will give you benefit. Please don't conceal any information when you realize that you might deviate from the protocol.

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2. 21 CFR 312.56(b): https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=312.56

3. Guidance for Industry: Investigator Responsibilities – Protecting the Rights, Safety and Welfare of Study Subjects https://www.fda.gov/downloads/Drugs/.../Guidances/UCM187772.pdf

INA-RESPOND Newsletter

INA-RESPOND: A MILESTONE FOR LIFE LEARNING AND BETTER ACHIEVEMENTS

By: HENING TIRTA KUSUMAWARDANI

Kursus Penyegar dan Penambah Ilmu Anestesia (KPPIA) is a continuing professional development held by PERDATIN (Perhimpunan Dokter Anestesiologi dan Terapi Intensif) Indonesia on 11-14 July 2018 at Shangri-la Hotel, Surabaya. The KPPIA was attended by residents, fellows, consultants, and general practitioner who had an interest in anesthesia and intensive therapy.

Hening Tirta K (Research Assistant for PROACTIVE in site 610) attended the event as a poster presenter. She presented the topic titled "Cost Effectiveness Analysis (CEA) of Antibiotics Usage for Sepsis Patients in Critical Care Units." She became the 1st winner of the oral presentation competition in the event.

Sepsis is life-threatening condition due to organ dysfunction caused by dysregulated response to infection. The incidence of sepsis has been arising for the last three decades compared to other common diseases such as AMI, stroke, and trauma. The purpose of the observational study was to determine the most cost-effective group combination of empiric antibiotic use in sepsis caused by respiratory tract infections.

The data was collected retrospectively from medical record of hospitalized patients with sepsis at the intensive care unit (ICU) of Dr. Mintohardjo Navy Hospital, Jakarta from January 2016–2018. The data was analyzed pharmacoeconomically to obtain cost-effectiveness between antibiotics class and total hospital cost. Results of the effectiveness calculation were interpreted into four quadrants: quadrant I with high effectiveness category with high cost, quadrant II with minimal cost category obtains high effectiveness, quadrant III with high effectiveness category with high cost with negative value, and quadrant IV with high cost but low effectiveness.

On 2-5 August 2018, she attended the 25th APCCCEM (Asia Pacific Symposium on Critical Care and Emergency Medicine) held at Discovery Kartika Plaza Hotel, Bali. APCCCEM welcomed research papers of international quality to be presented in the scientific meeting. On this event she presented 2 oral presentations and 1 poster presentation. At the end of the announcement she won as the 3rd winner for Best Paper Award.

The topic of the poster presentation was "Spontaneous Pediatric Intracranial Hemorrhage. Characteristic and Clinical Assessment". Intracranial hemorrhage (ICH) is often associated with infants experiencing nonaccidental injury, and one of the causes is vitamin K deficiency. The aim of the study was to determine the normal incidence, size, distribution, and natural history of intracranial hemorrhage in infants detected by head CT-scan within 72 hours of birth. The

Certificate

THE 24th ASIA PACIFIC SYMPOSIUM
ON CRITICAL CARE AND EMERGENCY MEDICINE 2017

Theme : "Multispecialty Approach To The Acutely Ill Patient"

August 3 - 5 , 2017 | Discovery Kartika Plaza Hotel, Kuta – Bali, Indonesia

Best Paper Award
as
CHAMPION / 3rd Winner

Name : **Hening Tirta Kusumawardani**

Title of Presentation : **Patient's Mortality Predictor With Severe Head Injury In Emergency Department**

Tri Wahyu Murni, MD, PhD Cardiothoracic Surgeon
Chairperson of Organizing Committee

Joseph Varon, MD, FACP, FCCP, FCCM
Chairperson of Scientific Committee

result showed that most intracranial hemorrhages are present after birth with seizure and unconsciousness as the most frequently present symptoms. ICH with parenchymal involvement carries a risk of adverse neurological sequelae with a mortality rate of 24.5%. The high mortality rate could be partly explained by the presence of perinatal asphyxia.

The oral topics of the presentations presented were:

1. Patient's Mortality Predictor with Traumatic Brain Injury in Emergency Department

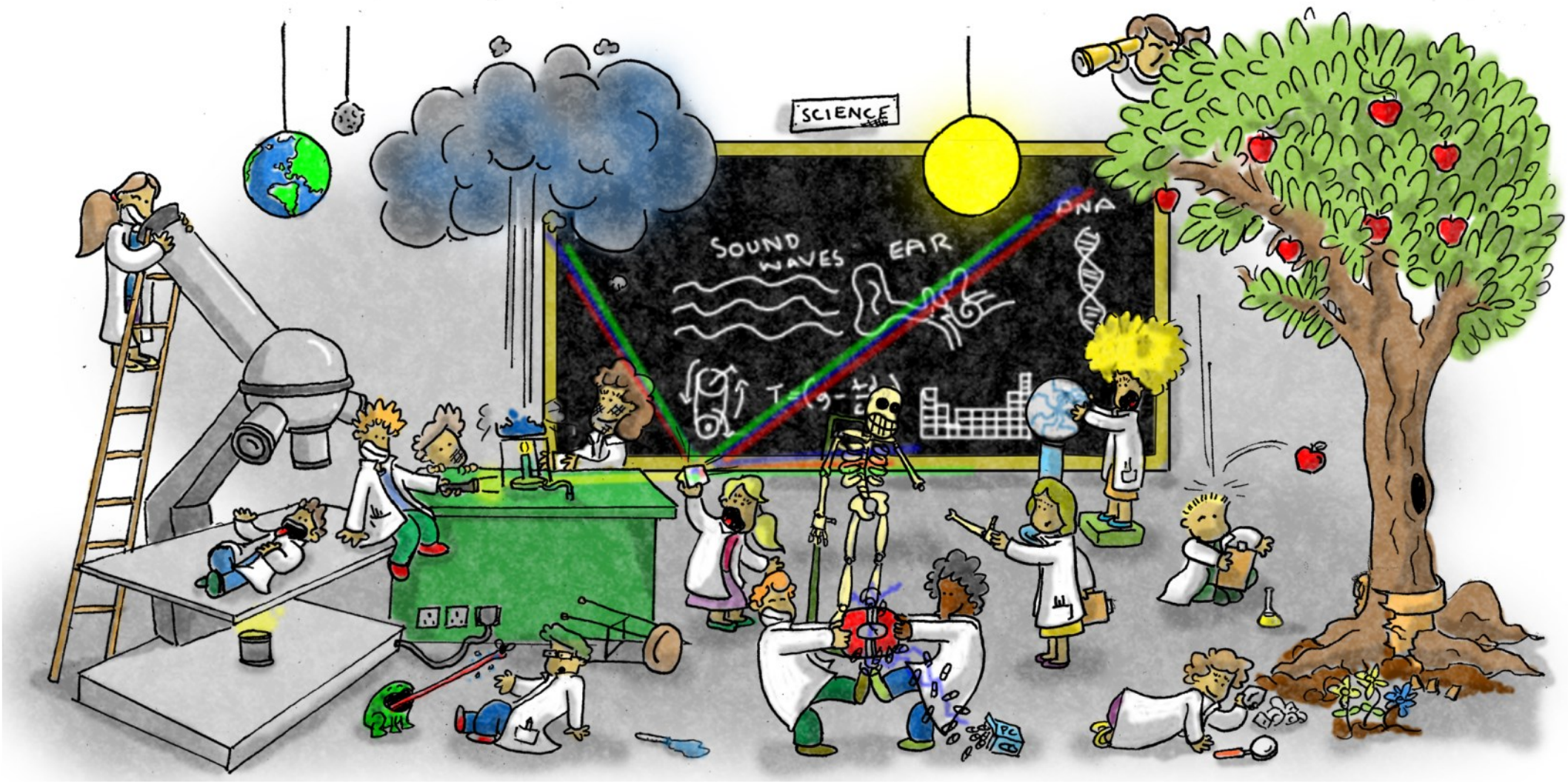
Severe head injury is still one of the major causes of death and disability in the productive age group. Moreover, secondary brain injury could occur after the initial injury as physiological disorders, such as ischemia, reperfusion, and hypoxia in brain areas. The aim of the cohort study was to determine all factors that can increase mortality rate in patient with severe head injury. Data was collected from medical records from Dr. Mintohardjo Navy Hospital, Jakarta from December 2015 until March 2018. The number of subjects was 426 patients. Data was analyzed using the Cox proportional hazards model. The result showed that secondary brain injury complications could occur due to severe head injury and influence the treatment management. Inadequate management can cause brain cell death and increased intracranial pressure, resulting in an increased event of herniation, worsening the patient's prognosis, and leads to death.

2. Scoring HIV-AIDS Mortality with Co Infection Encephalitis both Emergency Department and Intensive Care Unit Setting.

HIV infections allows the opportunistic pathogens to cause an opportunistic infections (OI) in HIV/AIDS-infected person. In addition, the opportunistic pathogens can cause reversible increase of HIV viral load. Neurologic OI, such as encephalitis has been showed that inadequate management may aggravate the patient's clinical condition leads to disability/ mortality. The aim of the retrospective cohort study was to develop a prognostic model that could predict the outcomes and to give a proper clinical management of HIV/AIDS encephalitis patients. Data was collected from 299 patients from December 2015 until February 2018. A multivariate Cox proportional hazards model was used to explore the association between variables. Roctab (ROC) analysis was used to determine the cut-off value of each numerical variable. The result of prognostic scoring model had 83.93% sensitivity and 84.73% specificity and can be used by clinicians because of its accuracy on diagnostic. Adequate treatment was considered as the major modified factors that could reduce the rate of mortality and morbidity, thus increase the survival rate of HIV-AIDS patients with encephalitis.

This great opportunity would not be realized without the support from the INA-RESPOND network, especially dr. Muhammad Karyana, M.Kes (The chair of INA-RESPOND). Thank you for the support and guidance. It has been a very valuable experience.

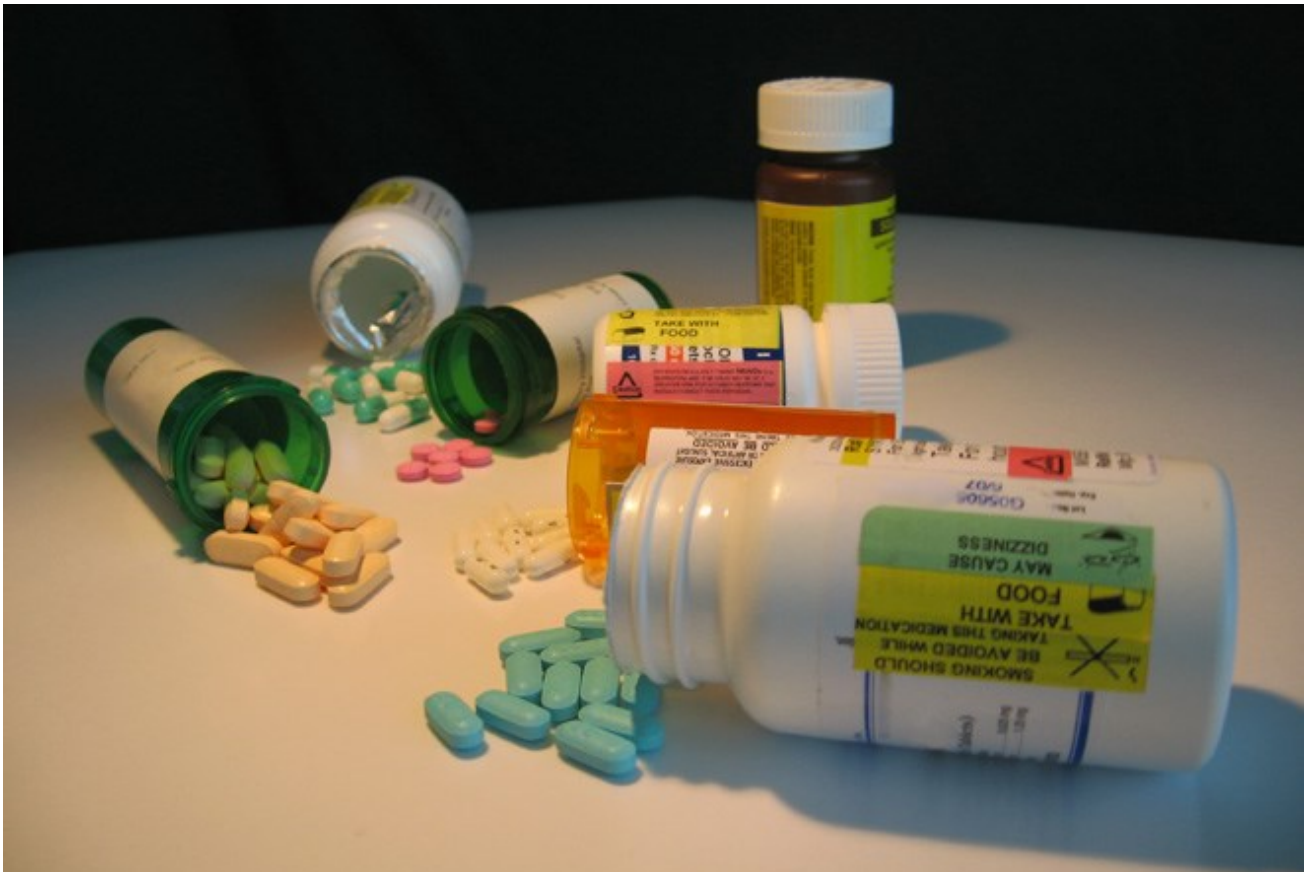
Science and Health



INA-RESPOND Newsletter

HIV Integrase Strand Transferase Inhibitors – Part 2

By: M.HELMI AZIZ



SCIENCE & RESEARCH

DOLUTEGRAVIR

Dolutegravir (Tivicay®) is the second generation of HIV integrase strand transfer inhibitor (INSTI) approved as the combination with other antiretroviral agents to treat HIV-1 infection in treatment-naïve and treatment-experienced patients aged 12 years or older. Unlike its predecessor, dolutegravir can be taken once daily without additional pharmacokinetic boosting and favorable resistance profile than other INSTIs.

Pharmacology

Dolutegravir works by impairing the function of the HIV-integrase DNA complex (1, 2). Dolutegravir binds to the two metal cations (Mg^{2+}) within the catalytic active site of the integrase enzyme, prevents the transfer of the cDNA strand into the host DNA, and inhibits the replication of HIV-1 (2).

Dolutegravir is rapidly absorbed after oral administration with a terminal half -life of 12–14 hours (1, 2). Compared with the fasting state, the administration of 50 mg dolutegravir with food increases the maximum serum concentration (Cmax) (2). Although it is not considered significant, administration with food is recommended in patients infected with integrase-resistant HIV-1 (2). After the oral administration, dolutegravir can be detected in cervical tissue, cervicovaginal fluid, vaginal tissue, seminal fluid, male rectal mucosal tissue, male colorectal tissue, and cerebrospinal fluid (1, 2).

Dolutegravir is predominantly metabolized by UDP-Glucuronosyltransferase Family 1 Member A1 (UGT1A1) in the liver (1, 2). Patient who had reduced activity UGT1A1 polymorphism had 31% increase in area under the curve (AUC) and 22% increase in Cmax (2). Dolutegravir is minimally excreted in urine, therefore, reduced renal function does not significantly alter the dosing of this drug (1, 2). However, there is no study which evaluates the dolutegravir pharmacokinetics in dialysis patients.

Dolutegravir inhibits the renal transporters Organic Cation Transporter 2 (OCT2) and Multidrug and Toxin Extrusion Transporter 1 (MATE1). This inhibition results in reversible and mild 10−14% creatinine clearance reduction (1, 2). In addition, due to the inhibition of OCT2, dofetilide (antiarrhythmic agent) is contraindicated when Dolutegravir is taken (2). Inducers of UGT1A1 such as carbamazepine, phenytoin, rifampicin, efavirenz, tipranavir, and etravirine should be avoided since these drugs strongly reduce the exposure of dolutegravir (1, 2). Antacids containing magnesium and aluminum should be taken minimum 6 hours before or 2 hours after the administration of dolutegravir to avoid drug complexes which can attenuate the effectiveness (1, 2).

Efficacy

In antiretroviral-naïve patients, 50 mg of dolutegravir shows the most efficacious effect. SPRING-2 trial which compared raltegravir (400 mg twice daily) and dolutegravir (50 mg once daily) with combination of 2 NRTIs efficacy showed that dolutegravir was non-inferior than raltegravir (3). The primary endpoint of this study was to achieve viral load of less than 50 copies/mL. At week 48, 88% of the dolutegravir group and 85% of the raltegravir group achieved the primary endpoint (3). There was no resistance mutation observed in the dolutegravir group. However, in the raltegravir group there were four NRTI mutations and one INSTI mutation (3).

FLAMINGO study showed that combination of 2 NRTIs with dolutegravir (50 mg once daily) was not only inferior but also statistically superior than 2 NRTIs with darunavir plus ritonavir (800 mg/100 mg) (4). At week 8, 87% subject in the dolutegravir group and 31% subject in the darunavir plus ritonavir group had plasma HIV-1 RNA < 50 copies/mL (4). At week 48, 90% subject in the dolutegravir group and 83% subject in the darunavir plus ritonavir group had plasma HIV-1 RNA < 50 copies/mL (4). Two subjects from each group were virological failure without any recorded resistance (4). Discontinuation due to adverse events was less frequent in the dolutegravir group (2%) than in the darunavir plus ritonavir group (4%) (4).

In treatment-experienced patients who developed resistance to two or more classes of antiretroviral drugs, the SAILING trial showed that once-daily dolutegravir, in combination with two other antiretrovirals, is well tolerated and more efficacious than the twice-daily raltegravir (5). In addition, resistance mutation was less likely to emerge with dolutegravir than raltegravir (5). VIKING study evaluated the activity of dolutegravir in HIV-1-infected subjects with genotypic evidence of raltegravir resistance (6). Subjects received DTG 50 mg once daily (cohort I) or 50 mg twice daily (cohort II) while continuing a failing regimen (without RAL) through day 10 (6). At week 24, 41% and 75% of the subjects had an HIV-1 RNA load of <50 copies/mL in cohorts I and II, respectively (6).

Raltegravir, Elvitegravir, and dolutegravir are the three currently approved INSTIs for HIV-1 treatment-naïve or treatment-experienced patients. Three of these drugs share similar characteristics and show rapid reductions of HIV RNA during treatment. Since this drug class works on virus enzyme, the tolerability and low-toxicity have become their important features. In the future, INSTIs will have a significant role in the future of HIV care and clinicians should be aware of the advantages and disadvantages of each drug.

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6. Eron JJ, Clotet B, Durant J, Katlama C, Kumar P, Lazzarin A, et al. Safety and efficacy of dolutegravir in treatment-experienced subjects with raltegravir-resistant HIV type 1 infection: 24-week results of the VIKING Study. The Journal of infectious diseases. 2013;207(5):740-8.

Remember our quiz last month?

Here are the answers to the questions;

1. A, 2. B, 3. C.

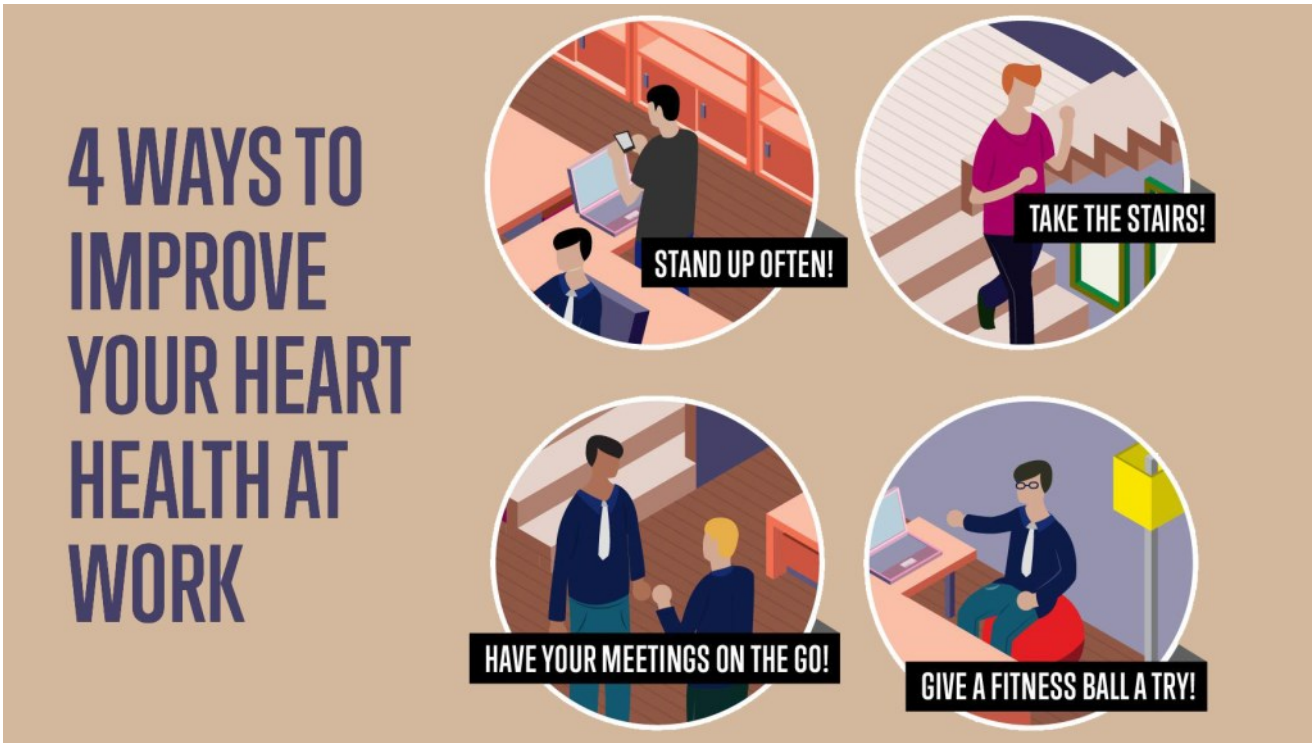
We received several correct answers, but unfortunately, there can only be one winner.

Congratulations to dr. Nenes Prastiwi—Research Assistant at site 580 (RS. Sardjito) who has come out as our quiz winner!

INA-RESPOND Newsletter

Be Dynamic And Fit: Leaving Your Sedentary Lifestyle

By: CALEB L. HALIM



HEALTH

Physical fitness plays an important role in creating and maintaining a good quality of life. By keeping our body in shape, we can avoid diseases that could threaten our lives, such as coronary heart disease. However, to get a fit body, we need a lot of time and effort. Just look at the athletes at the 18th ASIAN Games with their fit bodies; Most of them have practiced consistently / regularly with a strong commitment since they were children.

Although physical fitness is very important, most people tend to only pay more attention to their weight and are obsessed with achieving the ideal body weight by trying to reduce or increase their weight. Because the majority of our population is overweight (even belongs to the obesity category), one of the most well-known and frequently tried methods to lose weight is taking a diet program.

For a short-time/quick solution, diet programs are effective to reduce weight. However, research describes that people who succeed in maintaining their weight over a long period of time only through diet are very rare; they are exceptions. Most likely, we are not one of them. If diet is not an ideal way to maintain weight, what can we do to maintain our ideal body weight? The answer is physical activities! Physical activities can effectively remove fat and maintain our body weight in an ideal range.

In this article, we will try to look at the relationship between physical activity, physical exercise, body fitness, and heart disease.

Let's start with heart disease. Over the past decade, coronary heart disease has been the number one cause of death in developed and developing countries. This disease usually develops over the years in our body and is not diagnosed to the point that it is ultimately life-threatening. A systematic review and meta-analysis in 2015 assessed the correlation

between working hours and the risk of coronary heart disease (CHD) in 25 studies from Europe, the US and Australia. The results showed that employees who worked long hours (> 55 hours / week) had a stroke risk and had a higher risk of coronary heart disease (1.33 and 1.13 times respectively) than those who worked with standard hours.

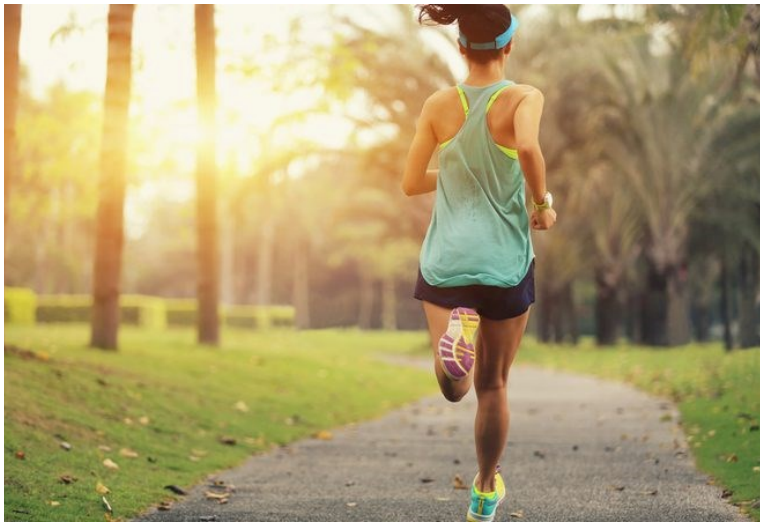
According to the National Health and Nutrition Examination Survey (NHANES) from 2011-2014 in America, an estimated 16.5 million Americans of ≥20 years have CHD, with a prevalence of 6.3% among adults. More amazing numbers can be seen in India where in 2004, 29.8 million CHD patients were recorded, and the number increased to 61.5 million in 2015. We can see that both in developed and in developing countries, the CHD case numbers are high. In Indonesia alone, according to the Indonesia Ministry of Health, the prevalence of CHD in 2013 based on doctor's diagnosis was around 883,447 people. It was estimated that the highest number was in West Java Province with as many as 160,812 people recorded. In addition, the Sample Registration System Survey (SRS) in 2014 showed that CHD was the highest cause of death in all age groups after stroke, which was 12.9%.

As one of the most preventable type of non-communicable diseases, heart disease has risk factors such as an sedentary lifestyle (inactive/lack of movement) and excess weight / obesity. Most people now have a sedentary lifestyle where they spend a lot of their time sitting behind a desk, behind the wheel, in front of a computer, in front of a TV, or behind a book. When we sit and don't move much for a long time, our body tends to experience fat accumulation and increased cholesterol, which may lead to obesity and ultimately result in heart disease. One of the easiest ways to decrease this risk is to reduce sitting time and increase time to do physical activities such as walking, washing dirty dishes, cleaning yards, repairing houses, etc.

Changing the time spent sitting with doing physical activities can reduce our risk of having a heart disease, but doing physical activities alone will not make our body fit. We need to add physical exercise to our daily lives. The problem is that most people don't know that physical activity and physical exercise are two different things. Thinking that physical activities such as walking from home to a bus stop, sweeping floors, cooking, or other daily activities that make us sweat as a physical exercise is

Exercise focusing on flexibility—Astavakrasana in yoga

Exercise focusing on strength—Cable chest press



Exercise focusing on cardiorespiratory endurance—Jogging at the park

a misunderstanding. So, what is the difference between physical activity and physical exercise?

Physical activity is any bodily movement produced by skeletal muscles that results in energy expenditure. Physical exercise is a planned, structured, and repetitive physical activity that aims to improve and maintain physical fitness. The American College of Sport Medicine (ACSM) recommends a person do physical exercise because the effects given are irreplaceable and the benefits of training outweigh any risks that may arise.

A good training program includes at least the following three things: resistance (muscle strength & endurance) training, cardiorespiratory, and flexibility training. These exercises are essential to do, in addition to the daily activities, to improve and maintain physical fitness. The table on the right is a summary of types of exercise recommended by ACSM.

So, let's start changing our lifestyle by reducing our sitting time and increasing the time spent for physical activities and exercise. Choose activities and physical trainings according to the objectives you want to achieve, the availability of facilities in your surroundings, and your personal preference; Keep in mind, though, we should always choose activities that are fun for us so that we can build healthy habits in our life and eventually create (and can maintain) a good quality of life.

Exercise	Frequency	Intensity	Time	Type	Repetitions	Sets	Volume	Progression
Resistance (Muscle strength & endurance)	Each major muscle group should be trained 2-3 days per week	60%-70% of 1RM: all beginner to intermediate exercisers should start form this level to improve muscle strength and induce hypertrophy. ≤50% of 1RM to train muscle endurance.	No specific time	All resistance training either using additional weight or just using body-weight.	8-12 reps are effective for improve muscle strength. 15-20 reps are recommended to improve muscle endurance.	2-4 sets are great for improving muscle strength and power.	-	Progressively increase the resistance/ weight or add more reps/sets
Cardiorespiratory	≥3-5 days per week. ≥3 days of vigorous exercise and ≥5 days for moderate exercise per week	Moderate: 64%-76% of Maximal Heart Rate (MHR) Vigorous: 77%-95% of MHR	Total of 150 minutes per week for moderate exercise, or 75 minutes per week for vigorous exercise.	Exercises that involving major group of muscle, continuous, and rhythmic is recommended.	-	-	Target volume 1000-2000 calories per week.	Progressively increase duration or intensity or frequency until desired goal is achieved or maintained
Flexibility	≥2-3 days per week	Stretch to the point of feeling tightness or slightly discomfort	Holding a static stretch for 10s-30s. For older persons 30s-60s may confer greater benefit	All major muscles in the body. Static flexibility (active or passive), dynamic flexibility, ballistic flexibility, and PNF are all effective.	-	-	Perform 60s of total stretching time each exercise	-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INA-RESPOND Newsletter

FREE Marketing for A FREE Program

By: ALY DIANA

COMIC CORNER

To write words and then try to put them in order is indeed a weird practice. Although this practice is not recommended, we sometimes do it anyway. When we are conducting an initial research, learning about a new topic, or trying to gather some ideas or to understand the underlying mechanism of a complex process, we often read and write down the important bits from our sources like articles / textbooks, hoping that later on we can arrange the information into structured paragraphs and into a good article.

Problems may rise as we often neglect to cite the source right away. Although we may feel that we will remember the source, after several days or weeks doing other activities, we most likely will forget; and when that happens, trying to find the original source will definitely consume our precious time. This (citing the source as we write) should be put into practice when we are writing our article draft. Personally, I find it very helpful to practice this.

Citing as we write will save us a lot of time in the long run and may prevent us from committing plagiarism. In the past, we might have an excuse for not doing this as most reference manager software was not free. Fortunately, now we have Mendeley, a FREE reference manager program produced by Elsevier. The program can be used on desktop / laptop computers (available on Windows, macOS, and Linux) or through Mendeley Web on Android or iOS. It also has the feature to sync our library between the different platforms.

Elsevier provides extensive guides (texts, videos, blogs, and webinars) on how to use and optimize Mendeley. The program has been developed for more than 10 years, but the stable version is only released this year (2018). It is free, but users are required to register the program. Elsevier provides Mendeley user with 2 GB of free personal web storage space and 100 MB shared library, which is upgradeable at a cost. Like many other "free" service, you can pay some amount of money to get a premium service, but the basic service seems to be enough for most users. Using the program, you can automatically generate bibliographies, easily import papers from other research software, easily import citations and / or papers from websites using web importer extension, find relevant papers based on what we read, access our papers from anywhere online, and read papers on the go (with iOS/Android apps).

In addition to being a helpful reference manager, Mendeley may help us build our academic social network and discover latest research. It introduces Mendeley Research Network, Mendeley Data (optimizes the discoverability of our data and fosters teamwork by facilitating the improved management of our datasets), Mendeley Careers, and Mendeley Funding (Elsevier aggregates and catalogs relevant grant information to help us find the right funding for our research).

As any other programs in this wide world, Mendeley is not free from limitations and challenges. As a new user of Mendeley, I have mixed feelings when operating it. However, the more I learn, the more useful I think this program is. Why don't you try it for yourself and perhaps let us know what you think. Good luck!

P.S: Students also like free things!

References:

Elsevier 2018. Mendeley. https://www.elsevier.com/solutions/mendeley

Oxford LibGuides 2018. Managing your references: Mendeley. https://libguides.bodleian.ox.ac.uk/reference-management/mendeley

Final Announcement

PIT PETRI 2018

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in conjunction with

The 3rd Annual INA-RESPOND International Symposium and The 7th Annual Bandung Infectious Disease Symposium

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INA-RESPOND Newsletter

The Indonesia Research Partnership on Infectious Disease newsletter is an internal bulletin of INA-RESPOND research network intended to disseminate information related to the network's studies, activities, and interests to all members of the network as well as its sponsors and related parties.

The INA-RESPOND newsletter welcomes all network members and stakeholders to contribute by submitting articles related to the network's studies and interests. Send your articles or subscribe to our latest newsletter by sending an email to INA.Secretariat@ina-respond.net