

## INA-RESPOND Secretariat

Badan Litbangkes, Kemenkes RI, Building  
4, 5<sup>th</sup> Floor,

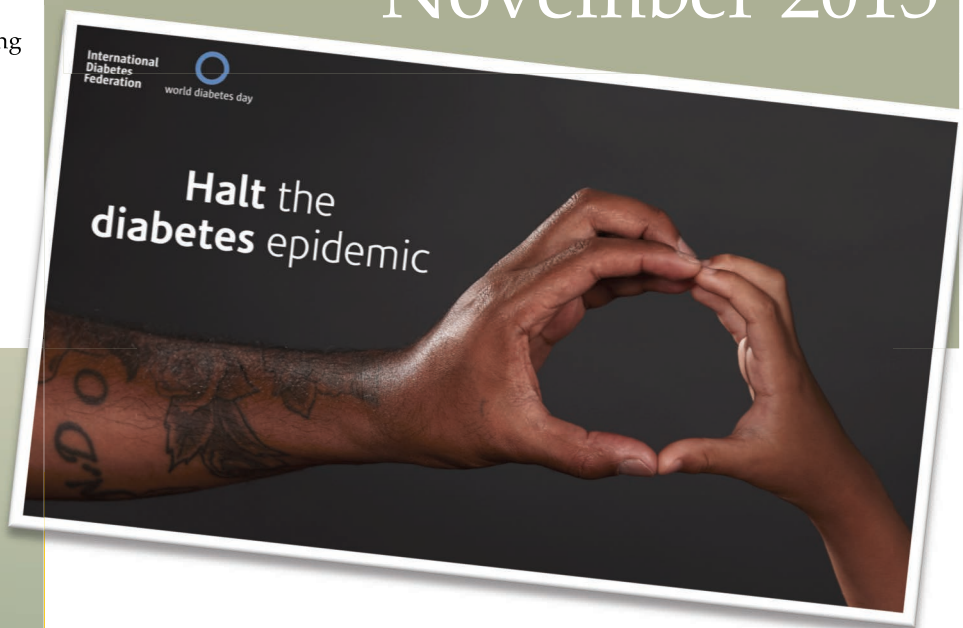
Jl. Percetakan Negara No. 29,  
Jakarta, 10560.

Phone: +62 21 42879189

Email: [INA.Secretariat@s-3.com](mailto:INA.Secretariat@s-3.com)

Website: [www.ina-respond.net](http://www.ina-respond.net)

# Newsletter November 2015



## In This Issue

2

Our congratulations to Prof. dr. M. Hussein Gasem, PhD, Sp.PD-KPTI, one of our network's Steering Committee members, who was recently inaugurated as Professor.

6

Do you know what biomarkers are? Have you ever heard that term? Why are they important? And how are they related to Tuberculosis? Let's find out here.

## World Diabetes Day 2015

World Diabetes Day (WDD) is celebrated annually on November 14. Led by the International Diabetes Federation (IDF), World Diabetes Day was created in 1991 by IDF and the World Health Organization in response to growing concerns about the escalating health threat posed by diabetes.

Activities and materials in 2015 will focus on healthy eating as a key factor in the fight against diabetes and a cornerstone of health and sustainable development.

IDF launched The Framework for Action on Sugar. The framework is IDF's official response to exploding sugar intake. National governments are requested to implement policies to reduce sugar consumption and advocates measures to increase access to healthy alternatives in order to help prevent new cases of type 2 diabetes.

Read more about diabetes and healthy eating in this edition.

Page 7



## ATS MECOR Training

INA-RESPOND network sent some of its researchers to attend the ATS MECOR Training program in Bekasi, Jakarta last month. Find the report in this edition.

Page 3

# Save The Date



Holiday is coming in really fast. Have you planned your holiday? On this occasion, we would like to congratulate **Dr. M. Hussein Gasem** for his Professor inauguration. We wish you much success, good fortune, and firm health. Here are some important meetings and events this month:

## 18 November

DSMB Meeting  
@NIHRD, Jakarta

## 28 November

Dr. M. Hussein Gasem's inauguration  
@Gd. Prof. Soedarto, UnDip,  
Semarang

\*Tentative

For further information and details about the meetings/ events, please contact us at the INA-RESPOND Secretariat, Jakarta. Phone: +62 21 42879189 ext. 102 or 112. Ask for Mr. Dedy Hidayat or Ms. Yuyu Nuzulurrahmah



## November Birthday

3 Nov	dr Bambang Sigit Riyanto, Sp.PD K-P	PI INA102 Site 580
4 Nov	Prof. Dr. Mansyur Arif, PhD, SpPK (K)	SC Member Site 550
5 Nov	Ms. Rina Sirait, S.Kom	LT INA101 Site 560
9 Nov	dr. Mulya Rahma Karyanti, MSc, Sp.A	Co-PI INA101 Site 530
11 Nov	Ms. Dewi Sriyanti	LT INA101 Site 560
13 Nov	Ms. Novitasari	Secretariat
16 Nov	Dr. Akbar Fahmi	RA INA101 Site 570
28 Nov	Ms. Widoretno	NIHRD Center 1

# Methods in Epidemiologic, Clinical and Observational Research Training



INA-RESPOND Team @ 2015 MECOR Training

**The American Thoracic Society (ATS) was founded in 1905 to improve health worldwide by advancing research, clinical care, and public health in respiratory diseases, critical illness, and sleep disorders. More than 15,000 physicians, research scientists, nurses, and other allied healthcare professionals have become members of this organization. To achieve its goal, one of ATS educational activities is to conduct training about Methods in Epidemiologic, Clinical and Observational Research (MECOR).**

MECOR Program is an intensive one week course for physicians and related health care professionals designed to strengthen capacity and leadership in epidemiological, clinical and operations research related to respiratory conditions, critical care and sleep medicine in middle and low income countries. The program set off from the idea that all countries need comprehensive internal health information to develop programs that meet their healthcare needs, and to get this information there has to be sufficient capacity to do basic clinical and epidemiologic research and to train future physicians and other health care providers. Consequently, the

ultimate goal of the MECOR Program is improving global lung health through development of local, country, and regional lung disease research capacity.

ATS first conducted the program in 1994 in Mexico, and it has been held in 3 continents since then: Asia (MECOR Indonesia, MECOR Turkey, MECOR India, MECOR China, and Mekong MECOR for Cambodia, Laos and Vietnam); Africa (PATS MECOR); and America (MECOR Latin America for Mexico, Brazil, Argentina, Ecuador, Chile, Uruguay, and Columbia.) 2015 ATS MECOR program, supported by *Perhimpunan Dokter Paru Indonesia (PDPI)*, has been held in Indonesia for three times; the

latest one was held on 19 – 23 October 2015 in Bekasi.



**Dr. Armaji Kamaludi giving presentation at MECOR training in Bekasi (October 2015)**

The MECOR program offers 3 levels of training. **The first level** is Introduction to Clinical Research. In this level the participants, who





are divided into small groups, are given basics on how to make a fundamental research question and review research design options. Moreover, the module also gives overview of basic biostatistics. **The second level** is Advanced Clinical Research Methods: Protocol Development. In this level, the participants develop research ideas into a research protocol individually. **The third level** is Advanced Clinical Research Methods: Data Analysis and Scientific Writing. Participants learn advantages and disadvantages of alternative study designs for answering specific research questions. They also develop and refine research protocol and Manual of Procedures (MOP). The goal of this level is for participants to be able to analytically evaluate and defend their own research protocol. The skills taught in this training will definitely be useful for the researchers in the INA-RESPOND network.

After getting more information and details about this program, INA-RESPOND Secretariat announced that 3 Research Assistants (RA) from sites would be sent to MECOR. Research Assistants who were interested in participating in the program were asked to send a motivation letter to the Secretariat. The three RAs

chosen are dr. Fatma (site 50), dr. Venty (site 560), and dr. Akbar (site 570). Besides the three RAs, representatives from INA-RESPOND Secretariat and NIHRD Center 2 also attended the program. They are Ms. Aini, Ms. Kanti, Ms. Lastari, dr. Nurhayati, dr. Retna, dr. Armaji, dr. Rossa, and dr. Annisa.

Glancing through the booklet given to participants before the training, we thought that the training would be very formal and serious, serving very extensive lectures that would need our full focus and attention to understand. We could not be more wrong! All faculty and support staff welcomed us excitedly, and we introduced ourselves, one by one, briefly. The lecturers put themselves in the same position as the students; this created a really comfortable atmosphere as everyone was learning from each other. Moreover, the modules were very interactive and practical. They started from the very basic principal of research design and gave us the simplest way to understand about research. Even statistics, which most of us considered complicated and difficult, were presented in a simple way for us to understand.

Day 1 – we focused on research ideas and questions: where to find

the ideas, how to select one, and how to form it into a good research question. We also started to learn about different types of study design and basic biostatistics where we learn about data types and how to best summarize it. We were divided into six groups based on the different research fields we are interested in, led by a research advisor. At the end of day, we worked together to develop a protocol by finding a research question.

Day 2 – we were given 5 major topics: the principle of confidence interval, fundamental statistical testing, measure of association, developing protocol, determining prevalence and incidence. The fundamental statistical testing was particularly very insightful mainly because it talked about the three-step process of statistical testing, which are rarely found in text books. Besides that, it also covered  $p$ -value, type I and type II errors, and sample size.

Day 3 – we were given lectures by three lecturers: Stephen McCurdy, MD; Phillip Hopewell, MD; and Erlina Burhan, MD. We learned to determine which test to use for different research data type, to set population and sample selection methods, and to develop a good questionnaire as a useful research tool.

Day 4 – we focused on our small group work and rehearsed for our presentation the next day.

Day 5 – six research protocols from twenty nine students in level 1 and nine protocol from level 2 students were developed and presented on the fifth day.

Overall, 2015 MECOR Indonesia training was a big success. After the training, all students had a smile on their face and became more confident to start their own research. It was truly an unforgettable experience, and we hoped that we could share the knowledge to everybody; starting a research is not as scary as we might think if we understand what are required. Let's start now!

By:

Dr. Venty Muliana Sari,  
Dr. Akbar Fahmi, Dr. Fatmawati  
Ahmad, Dr. Nurhayati, Ms. Kanti  
Laras, Ms. Lastari, Dr. Retna, Dr.  
Armaji, Dr. Rossa, Dr. Annisa.

**“Writing is  
Easy Once  
You Know  
Where and  
How to Start”**

- Nurhayati @2015

# Latest News: A Glance of Research Progress in the World

## Biomarkers for Pediatrics Tuberculosis

INA-RESPOND has just joined the RePORT (Regional Prospective Observational Research on Tuberculosis) Consortium, along with India, Brazil and prospectively South Africa. One of the main objectives is to collect standardized data and specimens that will be useful for identifying biomarkers in tuberculosis. In this issue, we will learn briefly about it, particularly within pediatrics where the burden of tuberculosis is significant remains challenging to diagnose due to inadequate methods of pathogen detection in paucibacillary pediatric samples and lack of a child-specific host biomarker to identify disease.

[http://www.chemistryviews.org/details/news/1044481/Biomarkers\\_for\\_Tuberculosis.html](http://www.chemistryviews.org/details/news/1044481/Biomarkers_for_Tuberculosis.html)

<https://www.pinterest.com/resourcefulRN/nursing-tuberculosis/>

### What are “biomarkers”?

Biomarkers are objective characteristics that indicate a normal or pathogenic biological process, or a pharmacological response to a therapeutic intervention or vaccination. Thus, biomarkers can provide information about disease status, risk of progression, likelihood of response to treatment or of drug toxicity, and protective immunity after vaccine. Biomarkers can replace subjective clinical endpoints that describe how a patient feels, functions, or survives, in a clinical trial. One of the most useful finding of biomarkers is for HIV. Plasma HIV RNA is used as a surrogate endpoint for anti-retroviral trials as well as a predictor for the occurrence of opportunistic infections and death.

Present research on biomarkers for tuberculosis focuses on three areas: those that predict treatment efficacy and cure of active tuberculosis (e.g. sputum culture, molecular assays, imaging, gene expression profile, serological alternatives), the reactivation of latent tuberculosis infection (e.g. IGRA, interleukin 18, microRNA, metabolomics profiles) and the induction of protective immune responses by vaccination (e.g. whole blood and mononuclear cell growth inhibition assays). For the reasons mentioned above, biomarkers for pediatrics are of specific interest.

To facilitate this important issue, the National Institute of Health (NIH) convened a group of panelists to

develop a blueprint for the process of discovery and implementation of new diagnostic biomarkers for pediatric tuberculosis.

A biomarker that could be used to develop an accurate test for pediatrics tuberculosis would ideally: 1) measurable in blood or other biological specimens (urine, stool, saliva, buccal mucosal transudates, or exhaled air, 2) high sensitivity and specificity, 3) able to distinguish between latent and active tuberculosis disease, and 4) suitable for incorporation into a diagnostic platform that would provide a rapid and accurate result.

There has been progress in identifying host and pathogen biomarkers with diagnostic potential as well as in the development of new technologies. Development approaches on pathogen detection includes development of highly sensitive nucleic acid amplification platform, molecular detection of small fragments of tuberculosis-specific transrenal DNA and a rapid point of care detection of a highly conserved and specific class A  $\beta$ -lactamase naturally expressed and secreted by *M.tuberculosis*, using fluorogenic enzymatic test. The development of diagnostic approaches that do not rely on pathogen detection include: 1) specific microRNAs (miRNAs) in serum and sputum that show the potential to discriminate infected from healthy people and active from latent infection, 2) genome-wide transcriptional RNA signatures in blood can distinguish tuberculosis from other diseases and from latent tuberculosis infection and that risk scores based on gene expression may be useful for ruling out tuberculosis, 3) a T-cell activation marker present on circulating *M tuberculosis* specific T cells can discriminate active from latent infection, and 4) Haemeoxygenase-1 concentration in blood can discriminate active and latent tuberculosis, and unsuccessful vs. successful treatment.

Successful identification of a child-friendly tuberculosis diagnostic biomarker will require collaboration with many stakeholders, from concept development of the study design to the development of a point of care test appropriate for use in the endemic tuberculosis regions.





## More of us will develop and live with type 1 diabetes.

While type 1 diabetes can't be prevented, healthy eating is an important part of effectively managing it. Let's make healthy eating a right, not a privilege. Act today to change tomorrow.



# Healthy Eating - a Key Factor for Preventing Diabetes?

By  
Dr. Armaji Kamaludi

One of the most devastating non-communicable diseases that catch a lot of people's attention is Diabetes Mellitus. This disease attracted the International Diabetes Federation and the World Health Organization due to its alarming rise in 1991. It was decided by both organizations that there should be a campaign to address the issues of the disease. This decision was realized, and 14 November was chosen as the World Diabetes Day. The day also marks the birthday of Frederick Banting who collaborated with Charles Best and John James Rickard Macleod to first conceive the idea that led to the discovery of insulin in 1922.

Diabetes has become a huge and growing burden for many countries including Indonesia as the number of people living with diabetes is rising in the last decade. Around 387 million adults were living with diabetes in 2014, and this number is predicted to shoot up to around 600 million people by 2035. The cost to treat diabetes and its complications was estimated around USD 612 billion in 2014. This cost could be cut up to 11% if we could deal with the preventable risk factors for type 2 diabetes, one of them being engaged in healthy diet.

Although healthy diet might cost more than the unhealthy one, healthy lifestyles can prevent or delay type-2 diabetes up to 70%, and healthy eating can help to reduce risks and complications in people with diabetes. Healthy lifestyle is also important for treating the type-1 diabetes.

Children today are facing huge risks because of bad lifestyles. They are even predicted to be short-lived compare to their parents because of these lifestyles. Eating obnoxious food containing unbalanced nutrition is the most prominent risk factor to diabetes. Without proper knowledge about nutrition, they are likely to suffer in the

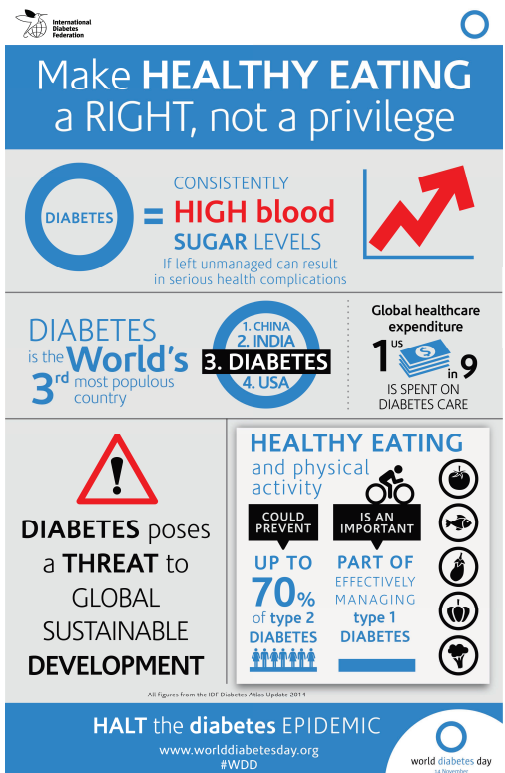
(continued)

## TAKE ACTION: PROVIDERS

Advocate at regional, national, and international level to make diabetes a priority on health and development agenda.

## EVERYONE

Educate yourselves about health risks associated with excess sugar intake and spread the information to your family and friends.



**Make HEALTHY EATING a RIGHT, not a privilege**

**DIABETES** = **HIGH blood SUGAR LEVELS**  
CONSISTENTLY  
If left unmanaged can result in serious health complications

**DIABETES is the World's 3<sup>rd</sup> most populous country**  
1. CHINA  
2. INDIA  
3. DIABETES  
4. USA

**Global healthcare expenditure 1<sup>st</sup> US IS SPENT ON DIABETES CARE**

**HEALTHY EATING and physical activity**  
COULD PREVENT UP TO 70% of type 2 DIABETES  
IS AN IMPORTANT PART OF EFFECTIVELY MANAGING type 1 DIABETES

**DIABETES poses a THREAT to GLOBAL SUSTAINABLE DEVELOPMENT**

**HALT the diabetes EPIDEMIC**  
www.worlddiabetesday.org  
#WDD

**world diabetes day**  
14 November

**Make HEALTHY EATING a RIGHT, not a privilege**

**STAY HEALTHY, DRINK WATER**

SUGAR SWEETENED BEVERAGES = UP TO 10 TEASPOONS OF SUGAR

FROM SUPERSIZED DRINKS TO SUPERSIZED YOU

WATER IS AN ESSENTIAL PART OF A HEALTHY DIET  
ZERO SUGAR

DRINK WATER TO REDUCE YOUR RISK OF BECOMING OVERWEIGHT AND DEVELOPING TYPE 2 DIABETES

WATER IS THE HEALTHY CHOICE  
MAKE SAFE DRINKING WATER ACCESSIBLE TO ALL

**HALT the diabetes EPIDEMIC**  
www.worlddiabetesday.org #WDD

future without even realizing it. It is our job to prevent this from happening to the best of our abilities.

Therefore, Indonesia must bring preventive measures into new boundaries. The issue should be battled up to its root. We should start doing something that can change the way we act, especially the attitude of future generations towards food. These youngsters are most likely to carry the burden of complication in the later time due to unhealthy living situation these days. There is no place to hide; we have to change our education system.

Education towards healthy living plays very important role in diabetes epidemic control. Many countries in the world such as England, Mexico, Japan, and Finland realize this fact. These countries take active role in educating their people about healthy food by putting a portion of food education in their school curriculum. The education is customized to the children's ability so that it is practical, fun, and engaging. It also involves cooking practice, which is very important in food processing.

**Make HEALTHY EATING a RIGHT, not a privilege**

**HEALTHY EATING**  
AN IMPORTANT PART OF PREVENTING TYPE 2 DIABETES AND EFFECTIVELY MANAGING ALL TYPES OF DIABETES

**MORE**  
Leafy vegetables, fruit, whole grain bread, brown rice, whole grain pasta, Peanut butter, unsweetened yogurt, nuts, Unsaturated fats

**LESS**  
White bread, white rice, refined pasta, Fruit juice, soda, sugar sweetened beverages, Processed meat, red meat, Chocolate spread, jam, Saturated fats

**OVERWEIGHT AND TYPE 2 DIABETES**

By 2025 2.7 BILLION people will be OVERWEIGHT  
In 2014 1.3 BILLION adults were OVERWEIGHT

OVERWEIGHT IS ONE OF THE BIGGEST RISK FACTORS FOR TYPE 2 DIABETES

By 2025 592 MILLION people will be living with DIABETES  
In 2014 387 MILLION people living with DIABETES

**HALT the diabetes EPIDEMIC**  
www.worlddiabetesday.org #WDD

Having good cooking skill to process food is one of the keys to healthy living. Although one should know the right ingredients to cook healthy food, the cooking skill is essential to ensure the food is well processed. The upside of the current technology in this part is that we can learn almost everything very easily via the Internet. However, cooking skill is an art that requires practice. Watching tutorial on the Internet will not help much if a teenager does not regularly practice it.

We as the citizen of the world should regroup and come up with brilliant moves to overcome diabetes epidemic. We should take part in intercepting the growing number of diabetes cases. Our future generations should be protected from any harm caused by misleading lifestyle. Our leader should give good example, and our regulations regarding food nutrition should be implemented. Last but not least, all of stakeholders must take part in this critical moment; if we do not act now, we might not have a future.

Source:

1. <http://www.idf.org/wdd-index/>
2. <http://www.foodrevolutionday.com/#ACYeeb6XKhfWsUhF.97>
3. <http://www.optidaily.com/nasional/2014/12/04/59/tentang-sejarah-hari-kesehatan-nasional>
4. [https://en.wikipedia.org/wiki/World\\_Diabetes\\_Day](https://en.wikipedia.org/wiki/World_Diabetes_Day)

Healthy eating is an important part to effectively manage type-1 diabetes. Let's make healthy eating a RIGHT, not a privilege.



# INA-RESPOND Study Updates

By dr. Anandika Pawitri,  
dr. Nurhayati,  
Ms. Novitasari

Site Number*	Site 510	Site 520	Site 530	Site 540
# Screened	364	1149	243	163
# Enrolled (Adult/Child)	233 (130/103)	181 (133/48)	39 (25/14)	49 (13/36)

Site Number*	Site 550	Site 560	Site 570	Site 580
# Screened	312	600	534	770
# Enrolled (Adult/Child)	137 (101/36)	230 (121/109)	187 (110/77)	139 (55/84)

\*510 – RSUP dr Hasan Sadikin  
520 – RSUP Sanglah  
530 – RSUPN dr Cipto Mangunkusumo  
540 – RSPI Prof Dr Sulianti Saroso  
550 – RSUP dr Wahidin Sudirohusodo

560 – RSUP dr Kariadi  
570 – RSUD dr Soetomo  
580 – RSUP dr Sardjito

## AFiRE Study (INA101) Updates

The AFiRE had screened 4,135 patients and enrolled 1,195 subjects (688 adults and 507 children) as of 22 November 2015. The top recruiter is currently held by site 510 (RSUP. Dr. Hasan Sadikin, Bandung). See chart for detailed information on the enrollment.

Based on INA101 Interim data analysis, two abstracts titled “Clinical and Etiological Diagnoses of Febrile Illness in Pediatrics in Indonesia” and “Dengue and Salmonella infections in Indonesian Children” were accepted by The World Society for Pediatric Infectious Diseases (WSPID) Scientific committee as poster presentations. Our investigators, dr Ninny Meutia Pelupessy, Sp.A and dr Dwiyantri Puspitasari, Sp.A, had a great opportunity to present their poster at the 9<sup>th</sup> World Congress of WSPID in Rio De Janeiro, Brazil, Nov 18-21.

Detailed screening and enrollment progress is available in portal folder: Studies\INA101\Screening progress.pdf or go to the following link: <https://ina-respond.s-3.com/EdmFile/getfile/797233>

## Sepsis Study (SEA050) Updates

How time flies! The study will end in about a month. On 31 December 2015 all screening and enrollment activities must stop. The follow-up period will continue until the end of January. Let’s rush!

Protocol v 2.0 was released on 26 November 2015 with a couple of changes in some of the sections. The major change would be to make the study data open access upon study completion. Based on INA-RESPOND Network Steering Committee meeting on 11-12 November 2015 in Jakarta, all Executive Committee of this study agreed to this point. The new protocol will go to NIHRD IRB and local IRB to be reviewed.

	Site 41 – RS dr. Cipto Mangunkusumo	Site 42 – RS dr. Wahidin Sudirohusodo & RS Universitas Hasanuddin	Site 43 – RS Sardjito
<b>Number of Screened Patients</b>	Adult : 108 Pediatric : 65 Total : 173	Adult : 77 Pediatric : 32 Total : 109	Adult : 145 Pediatric : 107 Total : 252
<b>Number of Enrolled Patients</b>	Adult : 13 Pediatric : 5 Total : 18	Adult : 23 Pediatric : 4 Total : 27	Adult : 22 Pediatric : 6 Total : 28
<b>Enrollment Expectation</b>	Adult : 15 Pediatric : 15	Adult : 25 Pediatric : 25	Adult : 20 Pediatric : 20
<b>Number of days after enrollment</b>	Day 74 (activation date: 6 August 2015)	Day 235 (activation date: 26 February 2015)	Day 179 (activation date: 23 April 2015)

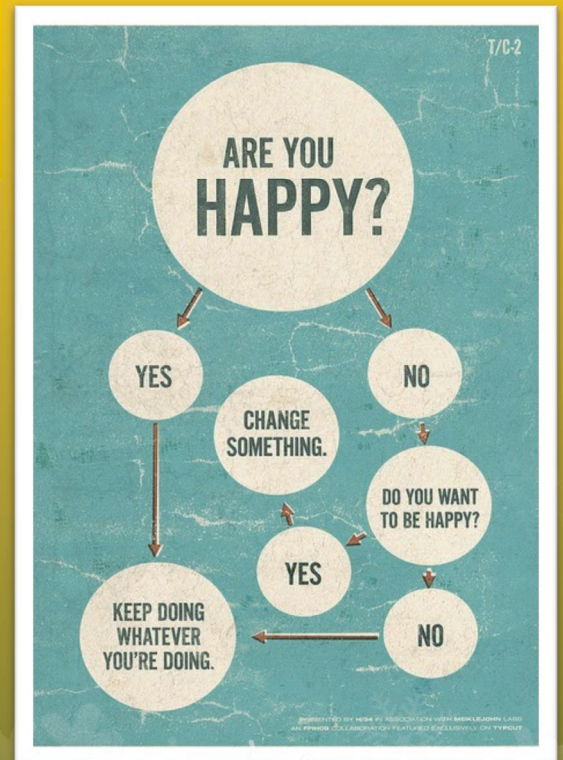
Screening and Enrollment Progress  
up to 22 November 2015

# Newsletter

Although the sun keeps rising from the east, seasons change, people change, and the world changes. For better or worse, change is a part of our life and thus, we should embrace it and make best of the situation it presents.

Our network is currently transforming; as we are growing bigger and learning from our past, we all hope that the change the network is undergoing will take us to a much brighter place. One thing remains the same through all the changes, though... We need to keep improving our good teamwork and strive for the best, coming up with creative and interesting ideas for our newsletter.

Having this on our mind, we are requesting all sites to take more active part in our network's newsletter. How? There are many ways you can contribute. One of them is to write and submit your articles for the newsletter. You can also give comments and suggestions to further improve our newsletter. Let's start now and make a change! ☺



## INA- RESPOND Newsletter

Advisors  
Art & Language  
Columnists

: dr. M. Karyana, M.Kes, dr. Herman Kosasih  
: Dedy Hidayat S, S.Kom  
: dr. Dewi Lokida, dr. Anandika Pawitri, dr. Nurhayati,  
Ms. Novitasari, dr. Venty Muliana Sari, Dr. Akbar  
Fahmi, Dr. Fatmawati Ahmad, Ms. Kanti Laras,  
Ms. Lastari, Dr. Retna, Dr. Armaji, Dr. Rossa,  
Dr. Annisa.  
: INA-RESPOND Network and Partners  
: **All Copyright and trademark are recognized**

Thanks to  
Disclaimer

We would like to hear from you. Go ahead and send us your scientific articles, team profile, or feedback about the newsletter to [INA.Secretariat@s-3.com](mailto:INA.Secretariat@s-3.com)