

Review Article

DID INDONESIA ACHIEVE THE MDGs GOALS BY 2015?

**Ramadhan Tosepu^{1,2*}, Devi Savitri Effendy³, Hartati Bahar³, La Ode Ali Imran Ahmad³,
Ambo Sakka³, Pitrah Asfian³, Hariati Lestari³**

¹Environmental Health Department, Faculty of Public Health, University of Halu Oleo, Indonesia

²Indonesian of Public Health Association Southeast Sulawesi

³Public Health Faculty, Halu Oleo University

Accepted: 10 March 2016

***Correspondence:**

Ramadhan Tosepu, M.Kes

E-mail : ramadhan.tosepu@uho.ac.id

ABSTRACT

MDGs 2015 are the program for the welfare of society. The countries that show the great achievement of MDGs goals remain the successful of the government of the countries. This paper aimed to provide the knowledge regarding the achievement of Indonesia in MDGs goals. The achievement could be seen from the distribution of poverty, Health development index, Nutritional status, maternal mortality, and Malaria status in Indonesia.

Key words: MDGs, Health Professionals, Indonesia

INTRODUCTION

Health development in Indonesia is an integral part of national development,¹ which is to increase the awareness, willingness, and ability to live² a healthy life for the health of everyone in order to realize an optimal degree of public health.³ In addition, it aims to provide health services easily, uniformly and cheaply.⁴ Therefore, the government needs to improve healthcare services for the better health of community. Remembering that health is one of the main pillars in improving the quality of human resources and the welfare of society.

Millennium Development Goals is the Millennium Declaration from the result of the agreement of 189 heads⁵ of State of the countries of the United Nations which

began in September 2000, in the form of an eight⁶ point goals to be achieved by 2015. The target is to achieve people's welfare and development of society by 2015. It is a major challenge in the development around the world that is unraveled in the Millennium Declaration, adopted by 189 nations and signed by 147 heads of government and heads of state.

There are eight points that have been agreed to be achieved by the member countries of the United Nations in order to increase the welfare of society by 2015,⁷ which are grouped into eight grains of the Millennium Development Goals, namely Eradicate extreme poverty and hunger; Achieve universal primary education; Promote gender equality and empowerment of women; Reduce child

mortality; Improve maternal health; Combat HIV/AIDS, malaria, and other infectious diseases; Ensuring environmental sustainability; and Develop a global partnership for development.

In line with this, the successful indicators of health development in Indonesia can be seen from the very high commitment of the Republic of Indonesia to achieve health development based on MDGs. This paper aims to provide the insight of knowledge regarding the achievement of Indonesia in MDGs.

METHODS

Secondary data analysis from literature review was conducted, which was from databases such as Scopus, DOAJ, and Google Scholar and from grey literatures from the report of Ministry of Health Indonesia, Indonesian Public Health Association, Statistic of Indonesia, and other sources.

RESULTS AND DISCUSSION

The results of the literature reviews were divided into: Distribution of Poverty, Human Development Index, Maternal

Mortality, and Distribution of Malaria disease.

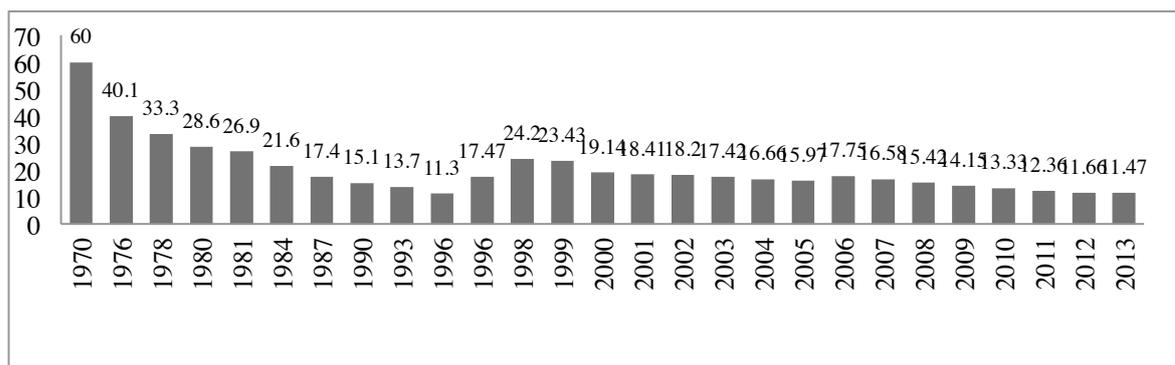
*Distribution of Poverty in Indonesia*⁴

Poverty is a global problem.⁸ Poverty is a situation in which there is a shortage of things that are unusual to possess such as food,⁹ clothing,¹⁰ shelter and drinking water, and these things are closely related to the quality of life. Poverty also means lack of access to education¹¹ and employment was able to overcome the problems of poverty and obtain proper honor as citizens.

In Indonesia, the poverty in Indonesia in 1970 reached 70% and has decreased significantly until 1996. But in 1998 the number of poor people was increased to be 24.2%, and gradually falling down in 2013 (11.47%). However, this percentage remains high comparing to other countries. Therefore, the strategy to reduce poverty needs to make.

Effective poverty reduction strategy for Indonesia consists of three components: Making Growth Work for the Poor; Making Social Services Work for the Poor; Making Public Expenditure Work for the Poor.

Figure 1. Distribution of Poverty in Indonesia, During 1970 - 2013



There are three changes taking place in Indonesia, which have the potential to help the poor. First, along with the growth, the Indonesian economy is being transformed from an economy that

relies on agriculture to the economy on service sector and industry. The priority can help the poor with more friendly investment climate in rural areas, especially by building the better rural

roads. Second, as the strengthening of democracy, the government is changed in providing services, from centralized to decentralized through local governments. The priority for this condition is to increase the capacity of local governments and better incentives for service providers. Third, Indonesia integrates internationally, and its social protection systems are being modernized so that Indonesia is both socially equitable and economically competitive. The priority to make government spending for the poor is the shift from market intervention to commodities consumed by the poor (such as fuel and rice) to targeted income support for poor households, and using the fiscal

space to improve critical services such as education, health, water and sanitation.¹¹

Human Development Index⁴

HDI concept was first publicized through the United Nations Development Programmed Report 1996, which then continues every year. Four points to note in human development is productivity,¹² equity,¹³ sustainability,¹⁴ and empowerment.¹⁵ The emphasis of Indonesia's national development actually happened has embraced the concept of call, namely the concept of integral human development that requires improving the quality of life of the population physically,¹² mentally and spiritually.

Table 1. Distributions of Human Development Index by Province In Indonesia, During 2004 – 2013

Province	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Aceh	68,7	69,05	69,41	70,35	70,76	71,31	71,7	72,16	72,51	73,05
Sumatera Utara	71,4	72,03	72,46	72,78	73,29	73,8	74,19	74,65	75,13	75,55
Sumatera Barat	70,5	71,19	71,65	72,23	72,96	73,44	73,78	74,28	74,7	75,01
Riau	72,2	73,63	73,81	74,63	75,09	75,6	76,07	76,53	76,9	77,25
Jambi	70,1	70,95	71,29	71,46	71,99	72,45	72,74	73,3	73,78	74,35
Sumatera Selatan	69,6	70,23	71,09	71,4	72,05	72,61	72,95	73,42	73,99	74,36
Bengkulu	69,9	71,09	71,28	71,57	72,14	72,55	72,92	73,4	73,93	74,41
Lampung	68,4	68,85	69,38	69,78	70,3	70,93	71,42	71,94	72,45	72,87
Kepulauan Bangka Belitung	69,6	70,68	71,18	71,62	72,19	72,55	72,86	73,37	73,78	74,29
Kepulauan Riau	70,8	72,23	72,79	73,68	74,18	74,54	75,07	75,78	76,2	76,56
DKI Jakarta	75,8	76,07	76,33	76,59	77,03	77,36	77,6	77,97	78,33	78,59
Jawa Barat	69,1	69,93	70,32	70,71	71,12	71,64	72,29	72,73	73,11	73,58
Jawa Tengah	68,9	69,78	70,25	70,92	71,6	72,1	72,49	72,94	73,36	74,05
Yogyakarta	72,9	73,5	73,7	74,15	74,88	75,23	75,77	76,32	76,75	77,37
Jawa Timur	66,8	68,42	69,18	69,78	70,38	71,06	71,62	72,18	72,83	73,54
Banten	67,9	68,8	69,11	69,29	69,7	70,06	70,48	70,95	71,49	71,90
Bali	69,1	69,78	70,07	70,53	70,98	71,52	72,28	72,84	73,49	74,11
Nusa Tenggara Barat	60,6	62,42	63,04	63,71	64,12	64,66	65,2	66,23	66,89	67,73
Nusa Tenggara Timur	62,7	63,59	64,83	65,36	66,15	66,6	67,26	67,75	68,28	68,77

Kalimantan Barat	65,4	66,2	67,08	67,53	68,17	68,79	69,15	69,66	70,31	70,93
Kalimantan Tengah	71,7	73,22	73,4	73,49	73,88	74,36	74,64	75,06	75,46	75,68
Kalimantan Selatan	66,7	67,44	67,75	68,01	68,72	69,3	69,92	70,44	71,08	71,74
Kalimantan Timur	72,2	72,94	73,26	73,77	74,52	75,11	75,56	76,22	76,71	77,33
Kalimantan Utara	-	-	-	-	-	-	-	-	-	74,72
Sulawesi Utara	73,4	74,21	74,37	74,68	75,16	75,68	76,09	76,54	76,95	77,36
Sulawesi Tengah	67,3	68,47	68,85	69,34	70,09	70,7	71,14	71,62	72,14	72,54
Sulawesi Selatan	67,8	68,06	68,81	69,62	70,22	70,94	71,62	72,14	72,7	73,28
Sulawesi Tenggara	66,7	67,52	67,8	68,32	69,00	69,52	70,00	70,55	71,05	71,73
Gorontalo	65,4	67,46	68,01	68,83	69,29	69,79	70,28	70,82	71,31	71,77
Sulawesi Barat	64,4	65,72	67,06	67,72	68,55	69,18	69,64	70,11	70,73	71,41
Maluku	69,0	69,24	69,69	69,96	70,38	70,96	71,42	71,87	72,42	72,70
Maluku Utara	66,4	66,95	67,51	67,82	68,18	68,63	69,03	69,47	69,98	70,63
Papua Barat	63,7	64,83	66,08	67,28	67,95	68,58	69,15	69,65	70,22	70,62
Papua	60,9	62,08	62,75	63,41	64,00	64,53	64,94	65,36	65,86	66,25
Indonesia	68,7	69,57	70,1	70,59	71,17	71,76	72,27	72,77	73,29	73,81

It could be seen from table 1 that the Human Development Index in each province has been increased every year, which remains the good index for Indonesian society. However, this index remains imbalance, for instance the HDI between Jakarta, the highest index; and provinces in east of Indonesia, such as Papua, the lowest position of HDI in Indonesia. The government needs to pay attention regarding this condition. HDI is built actually through the approach of the three basic dimensions: Dimensions long and healthy life; Dimensions of knowledge; Dimensions of a decent life. Human development implies that the benefits of growth should have an impact into a human life, and human development by emphasizing that people should be able to participate actively in influencing processes that shape their lives

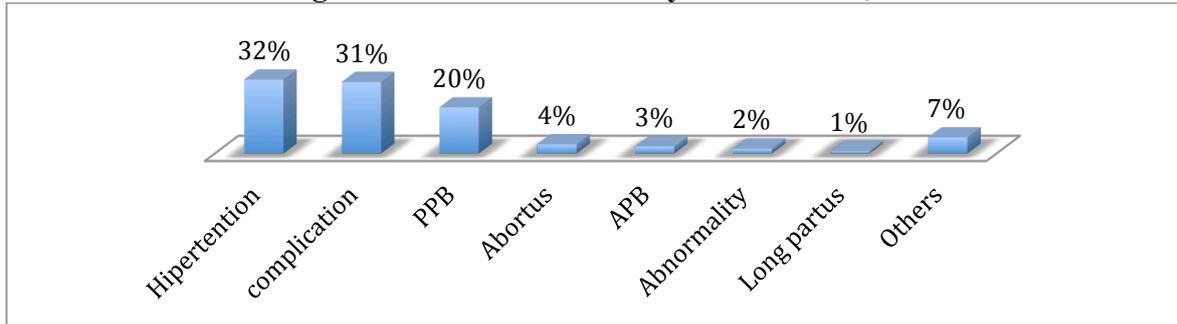
Improving standards of living must be accompanied by an increase in the degree of public health. During this time, health problems are often regarded as

second only to economic problems.¹² This should be an arduous task for the government to increase the capacity of community life,¹⁶ and so we need a balance in its application. Improvement of public health is not only the task of the health ministry but also a task for the government and non-government elements.

Maternal Mortality in Indonesia⁴

The maternal mortality in Indonesia still remains high, and there are five causes of maternal deaths such as haemorrhage, hypertension in pregnancy, infection, obstructed labour, jammed and abortion. And from these causes, haemorrhage, hypertension in pregnancy, and infections are dominant in the mortality of mothers. The proportion of the three causes of maternal death actually has changed, which the bleeding and infection tend to decrease while increasing the proportion hypertension in pregnancy. It is more than 30% of maternal deaths in Indonesia in 2010 caused by hypertension in pregnancy.

Figure 2. Maternal Mortality In Indonesia, 2013



In line with that, an estimated 20% of pregnancies would experience complications.¹⁷ Most of these complications can be life-threatening, but most complications can be prevented and dealt with if the mother immediately seeks help to health workers;¹⁸ health professionals conduct the appropriate handling procedures, including the use pantographs to monitor the progress of labor, and the implementation of active management of the third stage to prevent bleeding post copy;¹⁹ health professionals are able to identify complications early; if complications occur, medical personnel can provide first aid and take action stabilization of patients before referral; effective referral process;²⁰ services in hospitals are fast and efficient.

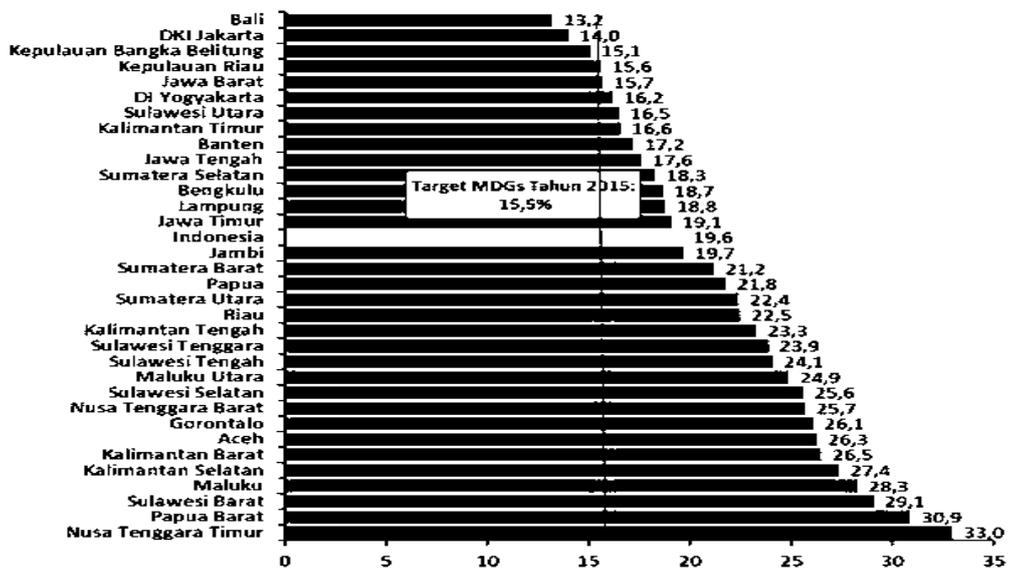
There are three types of area interventions to reduce mortality and maternal and neonatal morbidity, namely through: the first increase in antenatal care are able to detect²¹ and handle cases²² of high risk adequately; The second aid clean¹⁸ and safe delivery by skilled health personnel,²⁰ post-natal care and birth;²³ third obstetric and neonatal care and comprehensive base that can be reached.

Strategic Plan of the Ministry of Health in 2010-2014,²⁴ targeted at the end of 2014 in each district/city there are at least four health centers able to neonatal inpatient basis and the Hospital District capable of implementing comprehensive.²⁵ Through the management of basic and comprehensive neonatal care, health centers and hospitals are expected to be a leading institution in which the complications and referral of cases can be resolved quickly and appropriately.

Nutrition of Children⁴

Among 33 provinces in Indonesia, there were 19 provinces had prevalence of underweight children above the national prevalence rate, ranging from 19.7% up to 33.1%. On the basis of the MDG targets by 2015, it was three provinces that had reached target, namely 13.2% in Bali, 14.0% in Jakarta, and 15.1% in Bangka Belitung. This condition still remains a serious problem, especially for those provinces having the prevalence of malnutrition in children under five between 20.0 to 29.0%, and it is considered very high when the prevalence of more than 30%.

Figure 3. The percentages of Children under five are malnutrition by weight for age by province in Indonesia, 2013



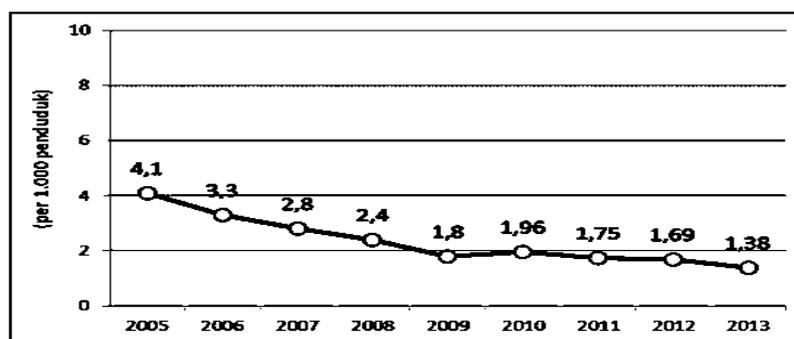
Another indicator is the nutritional height for age. It shows an indication of the nature of chronic nutritional problems as a result of circumstances in the long term, for instance: poverty,²⁶ unhealthy lifestyle⁶ and less feeding since was born that cause children to be short. On the other hand, indicators of nutritional status based on the index Weight/Height²⁷ gives an indication of the nature of acute nutritional problems as a result of events that occur in the short term, for instance, there is an outbreak of disease and lack of food that make children thinner. Beside, Indicator weight/height and BMI/Age can also be used to identify underweight²⁸ and overweight.²⁹ It is in

response that skinny and fat at an early age can result in a risk of various degenerative diseases in adulthood.

Distribution of Malaria Disease

Nationally, the morbidity from Malaria during the years 2005-2013 was likely to decline from 4.1 per 1,000 populations at risk in 2005 to 1.38 per 1,000 populations at risk in 2013. While the target of the Strategic Plan of the Ministry of Health for malaria morbidity (API/annual parasite Incidence) 2013 was less than 1.25 per 1,000 populations at risk. Thus, the API 2013 coverage did not reach the target of the Strategic Plan 2013.²⁴

Figure 4. Annual parasite incidence in Indonesia, during 2005 – 2013



The region is hit by malaria mostly in Eastern of Indonesia,³⁰ especially Papua province located as the endemic of malaria,³¹ the first morbidity rank of 10 major diseases. Malaria in Papua is still difficult to eradicate due to inadequate environmental regulation, the low economic status that leads to malnutrition,³² limited health care and the lack of medical personnel, drug resistance caused by people who do not comply in taking medication and behavior were less supportive of healthy lifestyles.

In this regard, the mobility of people to this area³³ has a great risk of contracting malaria. On the other hand, Climate change,³⁴ forest fires³⁵ and the rapid development process led to the spread of the disease. Therefore, Malaria requires handling multidimensional, both society and the government should be active in addressing this issue. Public health personnel as part of health workers in Indonesia have a variety of methods in solving cases of malaria. Those methods include preventive efforts by conducting a community approach.³⁶ This approach is very important because it will lead to public confidence in the health care workers. The next stage of health workers will easily provide input and health messages to their message. So the establishment of trust between the public and health workers is key to the success of health programs, such as health education programs.

CONCLUSIONS

The conditions described above consisting of poverty in Indonesia, maternal mortality, HDI, Nutrition, and Malaria status remain the unsuccessful of Indonesia in achieving the MDGs goal in 2015. The unequal health status and health development among regions in Indonesia still exist. Indonesian government needs to do great efforts. Although the program of

MDGs ended in 2015, it does not mean the programs are also stop working. The national development program today will lead to the SDGs program, the continuing program of MDGs.

REFERENCES

1. Alisjahbana AS. Peta Jalan Percepatan Pencapaian Tujuan Pembangunan Milenium di Indonesia. 2010(Jakarta).
2. Addo-Atuah J. Making a case for a public health orientation in global pharmacy education and practice in the context of the Millennium Development Goals (MDGs). *Currents in Pharmacy Teaching and Learning*. 9// 2014;6(5):723-729.
3. Indonesia PR. Rencana Kerja Pemerintah Tahun 2016 2015(Jakarta).
4. Kementerian Kesehatan R. Profil Kesehatan Indonesia. 2014. Jakarta.
5. Sachs J. The MDG decade: looking back and conditional optimism for 2015. *The Lancet*. //;376(9745):950-951.
6. Syairudin B, Trisunarno L, Gunarta IK. Strategy for Achieving the Millennium Development Goals 7-10 through Knowledge-based Sustainable Design Approach. *Procedia - Social and Behavioral Sciences*. 1/20/ 2015;169:61-68.
7. Thomsen S, Ng N, Biao X, et al. Bringing evidence to policy to achieve health-related MDGs for all: justification and design of the EPI-4 project in China, India, Indonesia, and Vietnam. *Global Health Action*. 2013;6.
8. Qian-Qian L, Man Y, Xiao-Lin W. Poverty reduction within the framework of SDGs and Post-2015 Development Agenda. *Advances in Climate Change Research*.

9. Sundari Ravindran TK. Poverty, food security and universal access to sexual and reproductive health services: a call for cross-movement advocacy against neoliberal globalisation. *Reproductive Health Matters*. 5// 2014;22(43):14-27.
10. Case A, Menendez A. Sex differences in obesity rates in poor countries: Evidence from South Africa. *Economics & Human Biology*. 12// 2009;7(3):271-282.
11. Bakker K. Trickle Down? Private sector participation and the pro-poor water supply debate in Jakarta, Indonesia. *Geoforum*. 9// 2007;38(5):855-868.
12. Noorbakhsh F. A Modified Human Development Index. *World Development*. 3// 1998;26(3):517-528.
13. Sagar AD, Najam A. The human development index: a critical review1. *Ecological Economics*. 6// 1998;25(3):249-264.
14. McGillivray M. The human development index: Yet another redundant composite development indicator? *World Development*. 10// 1991;19(10):1461-1468.
15. Neumayer E. The human development index and sustainability — a constructive proposal. *Ecological Economics*. 10// 2001;39(1):101-114.
16. Binagwaho A, Scott KW. Improving the world's health through the post-2015 development agenda: perspectives from Rwanda. *International journal of health policy and management*. Apr 2015;4(4):203-205.
17. Acuin CS, Khor GL, Liabsuetrakul T, et al. Maternal, neonatal, and child health in southeast Asia: towards greater regional collaboration. *The Lancet*. //;377(9764):516-525.
18. Hogan MC, Foreman KJ, Naghavi M, et al. Maternal mortality for 181 countries, 1980–2008: a systematic analysis of progress towards Millennium Development Goal 5. *The Lancet*. //;375(9726):1609-1623.
19. Ronsmans C, Graham WJ. Maternal mortality: who, when, where, and why. *The Lancet*. //30;368(9542):1189-1200.
20. Van Look PFA, Say L. I360 Maternal morbidity – the neglected face of maternal health in the MDG debate. *International Journal of Gynecology & Obstetrics*. 10// 2009;107, Supplement 2:S89.
21. Countdown Coverage Writing Group on behalf of the Countdown to Core G. Countdown to 2015 for maternal, newborn, and child survival: the 2008 report on tracking coverage of interventions. *The Lancet*. //;371(9620):1247-1258.
22. Akbar A, Wicaksono B, Dachlan EG. OS018. Maternal mortality and its mainly possible cause pre-eclampsia/eclampsia in developing country (Surabaya-Indonesia as themodel). *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health*. 7// 2012;2(3):184.
23. Baird J, Ma S, Ruger JP. Effects of the World Bank's maternal and child health intervention on Indonesia's poor: Evaluating the safe motherhood project. *Social Science & Medicine*. 6// 2011;72(12):1948-1955.
24. Kementerian Kesehatan R. Rencana Strategis Kesehatan 2010-2014. 2010(Jakarta).
25. Raak LM. Chapter 9 - Think Globally, Act Locally, and Plan Nationally An Evaluation of Sustainable Development in Indonesia at National, Regional, and

- Local Levels. In: Clark WW, ed. *Global Sustainable Communities Handbook*. Boston: Butterworth-Heinemann; 2014:125-215.
26. Fuster V, Voûte J. MDGs: chronic diseases are not on the agenda. *The Lancet*. //29;366(9496):1512-1514.
 27. Walker ARP. Nutrition-related diseases in Southern Africa: With special reference to urban African populations in transition. *Nutrition Research*. 7// 1995;15(7):1053-1094.
 28. Lahmann NA, Tannen A, Suhr R. Underweight and malnutrition in home care: A multicenter study. *Clinical Nutrition*.
 29. Pituch-Zdanowska A, Banaszkiwicz A, Dziekiewicz M, et al. Overweight and obesity in children with newly diagnosed inflammatory bowel disease. *Advances in Medical Sciences*. 3// 2016;61(1):28-31.
 30. Kumar A, Chery L, Biswas C, et al. Malaria in South Asia: Prevalence and control. *Acta Tropica*. 3// 2012;121(3):246-255.
 31. gunawan C. Severe Falciparum malaria in Samarinda, Indonesia. *International Journal of Infectious Diseases*. 4// 2014;21, Supplement 1:159.
 32. Olney DK, Kariger PK, Stoltzfus RJ, et al. Developmental effects of micronutrient supplementation and malaria in Zanzibari children. *Early Human Development*. 9// 2013;89(9):667-674.
 33. Lüthi B, Schlagenhauf P. Risk factors associated with malaria deaths in travellers: A literature review. *Travel Medicine and Infectious Disease*. 1// 2015;13(1):48-60.
 34. Adu-Prah S, Kofi Tetteh E. Spatiotemporal analysis of climate variability impacts on malaria prevalence in Ghana. *Applied Geography*. 6// 2015;60:266-273.
 35. Abdillah S, Tambunan RM, Farida Y, Sandhiutami NMD, Dewi RM. Phytochemical screening and antimalarial activity of some plants traditionally used in Indonesia. *Asian Pacific Journal of Tropical Disease*. 6// 2015;5(6):454-457.
 36. Fatmawati, Tasman H. An optimal control strategy to reduce the spread of malaria resistance. *Mathematical Biosciences*. 4// 2015;262:73-79.

Cite this article as: Tosepu R, Effendy DS, Bahar H, Imran LOA, Lestari H, Asfian P. Did Indonesia achieve the MDGs goals by 2015? *Public Health of Indonesia* 2016;2(1):1-9.