



THE ROLE OF HEALTH AND MEDICAL PROFESSIONS IN INDONESIA

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ABSTRACT

Introduction: In the context of public health, there are many problems in Indonesia, for instances the variation of many islands like Java , Sumatra, Kalimantan, Papua, Bali, Nusa Tenggara and so on, the huge number of population, the variation of tribes, income, public health services, the making of public health policy and so on. In relation to the above mentioned, then the application of public health program are need to be taken into mind, because of based on that there will be the variations of role of health and medical profession in the many differences of occupations. Method & Discussion: this paper is made based on library studies that compile from many data which hopefully can be used to construct the right of scientific writing in the context of public health sciences in relation to the General Medicine. Result & Discussion: quite clear that there are many public health aspects that need to be taken into policy in relation to clinical aspects, health financing aspects, health economic aspects, and the like which in general it will come to at least the understanding of primary health services and secondary health services functions. There is a need to develop the real and perfect program of the General Physician who can be used to support the Primary Health Centre. It means that what the Indonesian need to be implemented is not only the health financing program, but also the right Medical Education Program, the right Family Medicine Program, the right Primary Health Care, the right Population Health Care, and so on. Conclusion: there is a need to manage the role of health and medical profession in Indonesia in a specific way, where then based on that they can work together in a harmony with many other occupations, for instance sociologist, psychologist, lawyer, technique experts, and so on.

Keywords: Health, Medical, Service, Finance, Administration.

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Contribution/ Originality

This study contributes in the existing literature of public health and primary care in Indonesia. This study uses new estimation methodology of Public Health's policy and originates new formula to be healthy. The paper's primary contribution is finding that there is a need to increase the doctor's knowledge and skills.

1. INTRODUCTION

Indonesia is one of an ASEAN Countries that close to Malaysia, Singapore, Philippines, Thailand and Australia where because of the close distance between Indonesia and Malaysia, and between Indonesia and Singapore, and between Indonesia and Thailand then there will be so many difficult problems if the quality of health services and medical services of Indonesia are left behind by the closest countries.

AFTA (Asean Free Trade Agreement) and APEC (Asia Pacific Economic Cooperation) which will apply in ASEAN by 2016-2020 are a crucial time that all ASEAN countries will be faced directly, where of course in that period of time there will be including the health services and medical services.

Therefore there is quite easy to be understood in the context of public health, and therefore that is why the topic of this paper is viewing the role of health and medical profession in Indonesia.

2. METHOD & DISCUSSION

In 1920, Prof. Dr. Charles Edward A. Winslow from Yale University, United States of Amerika [1] the founding of the Public Health classic [2] made a statement that Public Health is the science and art of preventing disease, prolonging life, and promoting health and efficiency through organized community effort for the sanitation of environment, the control of communicable infections, the education of the individual in personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery to insure everyone a standard of living adequate for the maintenance of health. So organizing these benefits as to enable every citizen to realize his birthright of health and longevity

In relation to the above mentioned, then Hanlon [2] emphasized his statement that the dimensions of Public Health were in 4 (four) fields, including:

1. Activities in the community which related to food, water and milk supervisions, insects control, and air pollution control.
2. Prevention activities for diseases, death premature and the like, for example Communicable diseases control, nutritional deficiency, drug addictive, treatment for allergy and its sources in the community, mental diseases & behavior related to diseases, Occupational health, Carcinoma, Heart diseases, situation related to the risks as results of maternity, growth and development, the risks of genetic factors, accidents in the home, at the public and in industry, health rehabilitation to the victims of accidents and patients, and patients of dental caries.
3. Medical activities, for example, medical office organization, medical staff's education, distribution of medical staffs and medical facilities
4. Researches activities, for example Public Health Administration researches, liver infection outbreak, and so on.

According to Hanlon, the Preventive Medicine consist of Hanlon [2] :1.Biological Prevention, due to deficiency, and the like. 2. Prevention for the results of chonical diseases. 3. Prevention for the effects of diseases that cannot be prevented or cannot be cured.

Detels and Breslow [3] in the context of the Modern Public Health wrote that: Public Health Is the Process of Mobilizing Local, State, National and International Resources to Insure the Conditions in Which People Can Be Healthy. It means that public health instruments and its operational is very different from the traditional or the classical public health.

The view of the Modern public health is already mentioned in the Block V of public health lectures of GadjahMada University School of Health & Medicine as below [4], as the writing below :

“A Community And Society Is Not A Group Or Groups Of Individuals. Community Should Not Be Interpreted As The Local Community, But Also Seen Within National And International Context, For Example: Global Aids Movement.....”

John M. Last[1, 5] from University of Ottawa- Canada wrote that:

Public Health is one of the Efforts Organized by Society to Protect, Promote, and Restore the People's Health. It Is A Combination Of Sciences, Practical Skills, And Values (Or Beliefs) That Are Directed To The Maintenance And Improvement Of The Health Of All The People Through Collective Or Social Actions. The Programs, Services, And Institutions Involved Emphasize The Prevention Of Disease And The Health Needs Of The Population As A Whole. Public Health Activities Change With Changing Technology And Values, But The Goals Remain The Same – To Reduce The Amount Of Disease, Premature Death, And Disease Produced Discomfort And Disability In The Population. Public Health Is Thus A Social Institution, A Discipline And A Practice.

So the Modern Public Health as what mentioned above is quite flexible and what the most important is the goals: To Reduce The Amount of Disease, Premature Death, And Disease Produced Discomfort And Disability In The Population.

Last [5] also wrote that Preventive Medicine is identic to Community Medicine, that is “Preventive Medicine or Community Medicine is a specialized field of medical practice focusing on the health of defined populations in order to promote and maintain health and well being and prevent disease, disability, and premature death”. It means that do not forget that Preventive Medicine Is The Same As Community Medicine And That Is The Application Of Medical Practice In The Community That Focus To Promote And Maintain Health And Prevent Disease And Disability.

In 2001, it was a concept of The New Public Health [6] which emphasized that the new Public Health should be run in:1.Giving treatment for diseases which related to the decrease of environment, policy, economic and health services marketing.2. Public Health Can be run independently, it means Public Health can run based on self funding and self management, and not always dominated by governments. Below is the description of public health situation in ASEAN Countries including Indonesia around 2010 :

Table-1. Asean's Data in Health Quality Level

COUNTRY	Total Population (1000 people)	Human Development Index from 187 countries	Life Expectancy	Duration Rate of Study	Income per Capita (Dollar USA)	Fertility (in 1000 people)	Mortality (in 1000 people)	Non Communicable Diseases Mortality in 100,000 People (2008)		Percentage of Non Communicable Diseases Mortality To The Total Of Mortality (2010)	Percentage of Underfive Children With Low Body Weights (2006/2010)	Total Number of Labour Forces (2011)	Percentage of Jobless People To The Total Number of Labor Forces (2011)	Family Medicine Doctor
								Male	Female					
1 Brunei	412,9	30	78,1	8,6	45.690	19	3	534	489	82	-	198.097	-	Exist
2 Philippines	96.471,5	114	69	8,9	3.752	25	6	712	483	61	22	39.845.570	7,0	Exist
3 Indonesia	244.769,1	121	69,8	5,8	4.154	19	6	757	538	64	18	115.864.647	6,6	-
4 Cambodia	14,478,3	138	65,6	5,8	2.095	26	8	958	592	46	28	8.290.424	0,2	-
5 Laos	6.373,9	138	67,8	4,6	2.435	28	8	849	689	48	31	3.242.947	-	-
6 Malaysia	29.321,8	64	74,5	9,5	13.676	20	5	606	437	67	13	12.651.070	3,4(2010)	Exist
7 Myanmar	48.724,4	149	65,7	3,9	1.817	19	8	737	571	40	23	30.543.793	-	Exist
8 Singapore	5.256,3	18	81,2	10,1	52.613	10	4	372	239	79	-	2.863.909	2,9	Exist
9 Thailand	69.892,1	103	74,3	6,6	7.722	12	7	792	541	71	7	38.731.466	0,7	Exist
10 Vietnam	89.730,3	127	75,4	5,5	2.970	17	7	687	508	75	20	52.068.206	2,0	Exist

Source : Human Development Index 2012, World Population Data Sheet, Data Worldbank.org Cited from Kompas 25 October 2012 and Chongsuvivatwong 2011

Table 1 showing that there were many variations of ASEAN's Data which giving information about life expectancy, income per-capita, total number of population, the availability of Family Doctor, and so on, where hopefully by looking at the above table then there will be the best decision on Public Health Policy can be made. By looking at the Human Development Index, then there is quite clear that Singapore, Brunei Darussalam Darussalam and Malaysia is the 3 (three) best countries in ASEAN countries. In the context of the Life Expectancy, the best number is Singapore, Brunei Darussalam Darussalam, and the 3 (three) countries: Vietnam (75,4 years), Malaysia (74,5 years) and Thailand (74,3 years). In the context of the Duration Rate Of Study, Singapore is the best (10,1 years), Malaysia is the second (9,5 years), The Philippines is the third (8,9 years) and Brunei Darussalam Darussalam is the fourth (8,6 years). By looking at Income Per Capita (US Dollar), the best is Singapore (52.613 US Dollar), the second is Brunei Darussalam Darussalam (45.690 US Dollar), the third is Malaysia (13.676 US Dollar), and Thailand is 7.722 US Dollar, while Indonesia is 4.154 US Dollar almost the same as the Philippines which is its income per-capita is 3.752 US Dollar. Fertility (IN 1000 PEOPLE), the best is Singapore with 10 fertility among 1000 people, and the second is Thailand with 12 fertility among 1000 people, and the third is Vietnam with 17 fertility among 1000 people, while Indonesia is 19 fertility among 1000 people. Mortality In 1000 People, the lowest mortality is Brunei Darussalam Darussalam (3 mortality among 1000 people), the second is Singapore (4 mortality among 1000 people), and the third is Malaysia (5 mortality among 1000 people), while Indonesia is 6 mortality among 1000 people, and that number is the same as the Philippines 6 mortality among 1000 people Percentage of Underfive Children with low body weight (2006/2010), the lowest number or the best is Thailand with 7 Underfive Children with low body weight, and the second is Malaysia with 13 Underfive Children with low body weight, and Indonesia is the third with 18 Underfive Children with low body weight, while both Singapore and Brunei Darussalam Darussalam do not have any data for the Underfive Children with low body weight. Indonesia is the largest with total number of labor forces of 115.864.647 people, and the second is Vietnam with the total number of labor forces of 52.068.206 people and the third is the Philippines with total number of 39.845.570 people, and the fourth is Thailand with total number of labor forces of 38.731.466 people.

Percentage Of Jobless People, the highest number of jobless people in ASEAN is the Philippine with total number of 7%, and the second is Indonesia with total number of 6,6% almost

the same as the Philippines, and the third is Malaysia with total number of 3,4%, and then the fourth is Singapore with total number of 2,9 % and Vietnam with total number of 2,0%, while Brunei Darussalam Darussalam, Laos and Myanmar do not have any data. All ASEAN countries do have family medicine education program and already implemented the family medicine services in their own countries, except Indonesia, Laos and Cambodia. At the moment the Indonesian Government is running the Indonesian's Preparedness on the way to BPJS (Badan Penyelenggara Jaminan Social or the National Indonesian Health Insurance) which was started in the 1 January 2014, which was basically based on Administrative & Health Financing programme. It means that there will be very small attentions to the development of medical skills that related to the development of public health.

Table-2. Availability of Indonesian Doctor & Membership of JKN (National Health Insurance) in Primary Health Centre in Indonesia.

Total Number Of GP in PHC	Total Number of PHC	Total Number of Members	Rate of Members in each PHC
No GP	877	8.298.444	604
1 GP	3.212	30.142.348	938
2-3 GP	3.716	38.179.278	107
4-5 GP	834	7.913.104	992
>5 GP	257	2.466.853	1.007
Total	8.699	84.000.027	696

Source: Indonesian Ministry of Health (2014) cited from [Gatra](#) [7]

The above table showing that many Primary Health Centre or Puskesmas (Pusat Kesehatan Masyarakat) in Indonesia do not have Doctor or General Physician (GP), eventhough the number of each patients are very high (604 members). In Indonesia, so far so difficult to say whether someone is a patient or a member of health insurance, because of generally the people come to Primary Health Centre just at the time they have an illness, and the membership of health insurance is not understood very well by the member. In general, in Indonesia the people tend to come to hospital or medical specialist rather than come to Puskesmas (Primary Health Centre /PHC) or General Physicians (GP), therefore PHC or GP tend to be used when the people want to be referred to hospital or medical specialist. Based on the above writings, then it can be understood that the community know how well the GP in doing their jobs as a doctor, if not, may be there are something wrong with the health administration, medical record system, the sanitation, the nutrition, the water, the people habit in their life, and so on.

Tabel-3. Secondary health services or Hospital in JKN (National Health Insurance), 2014

Secondary Health Services (Hospital)	Total Number of Hospital	Total Number of hospital Cooperate with BPJS started From 1-1-2014	Potential Health Facilities Which May Be Cooperate With BPJS In 2014-2019
Government Hospital	589	533	56
Non Government Hospital	961	919	42
Private & Psychiatric Hospital	505	109	396
Military Hospital	114	104	10
Policeman Hospital	45	45	0
Total	2.214	1.710	504

Source: Indonesian Ministry of Health (2014) cited from [Gatra \[7\]](#).

By looking at the above table, actually not all military hospital can be joined in BPJS 2014. The same as that is also happened with the Private Hospital and Psychiatric Hospital which can be cooperated with BPJS by 1 January 2014 is 20 % only. The same cases as the above cases is also happened with Government Hospital and Non Government Hospital.

Why do the participation number of hospital (Secondary Health Services) and doctor or Puskesmas (Primary Health Services) relatively low ? Of course it must be something wrong with that program.

Tabel-4. Availability of Doctor and Hospital Bed for BPJS in November 2013

Number of PHC	9.599
Number of PHC with no doctor	1.327
The need to have doctors	3.706

Source: Indonesian Health Ministry (2013) cited from [William \[8\]](#)

Table 4 is showing different some different data from table 2 which says: Firstly, the total number of PHC is 8.699, on the other hand, in November 2013 total number of PHC was 9.599. Secondly, table 2 says that total number of PHC which do not have any doctor is 877 Primary Health Centre, on the other hand, data of November 2013 wrote that total number of PHC which do not have any doctor were 1.327 Primary Health Centre. The miss-classification that happened in the above table 2 and table 4 may be due to the low coordination among the sources.

Table 4 also showing the need to have 3.706 doctors. Based on this report actually, it can be understood clearly that recruiting medical sources is a very difficult problems, because of some reasons, including the kind of jobs, the salary, transportation, medical skills, and the like.

Table-5. Availability of hospital bed for BPJS in November 2013

Hospital	total bed
Government hospital	115.000
Non-Government hospital	83.600
The need to have some more bed	121.000

Source: Indonesian Health Ministry (2013) cited from [William \[8\]](#).

Table 5 showing that the availability of governmental hospital beds were higher than the non governmental hospital beds, and there was a need to have some more bed with a total number of 121.000 beds. It means that BPJS should planned whether adding some more hospital beds or building some more hospital to fulfill its needs.

In short, by looking at all the ASEAN's data of health indicators as what mentioned above, then it can be concluded that :

1. In generally the public health level of Indonesia is lower than the developed countries in ASEAN, but relatively a slight better than the other ASEAN countries.
2. Until the year 2012, the Indonesian Life Expectancy was 69,8 years the same as The Philippines, but lower than Singapore, Malaysia, Brunei Darussalam Darussalam, Thailand and Vietnam.
3. Until the year 2012, the Total Fertility Rate was 19 per 1000 population and that was the same as Brunei Darussalam Darussalam and Myanmar, but that number was much higher than Singapore (10 fertility in 1000 population) and Thailand (12 fertility in 1000 population).
4. Indonesia was the most populated country in ASEAN.
5. The Indonesian Mortality Rate was 6 in 1000 people, and it was the same as the Philippines, and higher than Brunei Darussalam Darussalam (3 in 1000 people), Singapore (4 in 1000 people) and Malaysia (5 in 1000 people).
6. Mortality Rate as a result of non communicable diseases in 100.000 people was 757 for man, and 538 for woman. It means that other than infection diseases in Indonesia, there were also non infection diseases.
7. In Indonesia, percentage of Underfive Children with Low Body Weight was 18%, and that was lower or smaller than the Philippines (22 %), Cambodia (28%), Laos (31%), Myanmar (23%) and Vietnam (20%), but this number was far from Thailand (7%) and Malaysia (13%).
8. Indonesia, Cambodia and Laos were the 3 (three) countries in ASEAN which have not implemented Family Medicine program in their countries yet.

The public health level of Indonesia can not be measured yet whether it will increase or not if the family medicine, health insurance, managed care or health financing will be implemented because of many reasons that need to considered too, for example the quality of health and medical resources, including their skills and behaviour, the environment where they are living, the facilities they need to work, training and education, researches, and so on.

3. CONCLUSION

The role of health and medical professions in Indonesia need to be considered perfectly, because of health development can not be seen from health financing and administration only, and therefore there is a need to take a look many other sectors, and human resources including the quality of General Physicians, nurse, midwife, Public Health workers, medical instruments, and the like.

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