

## **Unsatisfaction Patient in Healthy Industrial in Indonesia**

Ahmad Zafrullah Tayibnapis<sup>1</sup>, Lucia E. Wuryaningsih<sup>2</sup>

<sup>1</sup>Lecturer of Business and Economic Faculty of Surabaya University

<sup>2</sup>Lecturer of Faculty Pharmacy of Surabaya University

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**ABSTRACT:** *The purpose of this article is to assess and compare the needs of public health services with the healthcare business in Indonesia in line with the increased catastrophic disease and the high prevalence of mental disorders due to economic pressures, unhealthy lifestyle, poor environmental conditions, workload and family company which result in the detriment of state finances and family economy. Meanwhile, high education has made people, with upper middle income, have good awareness of personal hygiene and tend to seek health services that can provide information and education on current health, including in selecting the type of insurance. Most of them entered the Y gene, as tech-savvy, and want the best facilities, including in selecting hospitals, laboratories, and medicines. This research uses descriptive qualitative approach by exploring the primary data and secondary data to obtain conclusion that healthcare business is very prospective. Although this business has a formidable challenge, it will not be diminished by the development time. In 2014, healthcare business in pharmaceutical industry in Indonesia reached IDR 58.2 trillion, and the government has determined the pharmaceutical and medical equipment industries as the mainstay and priorities until 2035, given the high amount of expenditures per capita on health service each year. The increased level of life satisfaction in terms of healthcare results in the high level of satisfaction of patients and families with health providers, but the concern is still more focused on the high price of medicines and services.*

**Keywords:** *Healthcare business, Medical Services - Economic Burden*

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### **I. INTRODUCTION**

Diabetes mellitus (DM) is now the third largest cause of death in Indonesia after stroke and coronary heart disease. In 2014, the death from diabetes and complications was 6.7%, coronary heart disease 12.9%, and stroke 21.1% (Sample Registration Survey, 2014). Infectious disease, tuberculosis is a leading cause of death, reaching 67,000 per year with a prevalence of 647 per 100,000 people.

People in big cities are susceptible to stress because of workload and demands of work, while in small towns, the causes of stress are dominated by economic problems, such as difficulties in finding a job due to a low educational background and poor family condition. Mental emotional disorders, like stress, anxiety and depression, are not only the monopoly of urban society, but also the people living in villages and even those in outer islands, such as in Tojo Una-Una District in Central Sulawesi Province, Talaud District in North Sulawesi Province, Central Tapanuli, North Toraja, and Jember.

The Association of Indonesian Anesthesiology and Intensive Therapy Specialists (2016) states that currently there have been 1,720 specialist doctors in Indonesia, 450 of whom are in Jakarta and surrounding areas, but less than 20 Anesthesia Specialist Physicians are in Papua. This means that the distribution of Anesthesia Specialists is quite uneven because most of them are in the big cities. Class C hospital in district or small town requires at least 4 basic medical specialists and three supporting medical specialists, while additional medical personnel are needed along with the increasing number of participants of the National Health Insurance (JKN) program. At present there are 169 million JKN participants, with 2,553 partnering hospitals. The limited number of Anesthesia Specialist Physicians has caused the patients to move to general practitioners, thus threatening the safety of the patients themselves.

In 2009, total amount of health spending in Indonesia was US\$ 18.9 billion, and it reached US\$ 31.4 billion in 2014, or with an average annual increase of 13.23%. The annual expenditure per capita also rose sharply, from US\$ 64.20 billion in 2009 to US\$ 109.40 billion in 2014, or with an average annual increase of 14.08% (Global Health Expenditure - WHO, 2015). Meanwhile Frost & Sullivan Research Bureau (2014) states that Indonesia's expenditure per capita on health care is expected to rise to US\$ 237 billion in 2018 with the rate of growth of about 14%.

Current population of Indonesia is 258 million people, with health service consumption expenditure of IDR 363 trillion. If the population of Indonesia reaches 262 million people in 2018, it can be estimated that the health service consumption expenditure will be approximately IDR 817 trillion. This means that the economic burden of the country and the families can reach thousands of trillions of rupiah just for health service expenditure alone. It is feared that there will be a decline in service productivity, which in turn causing the loss of demographic dividend, including the disruption in the achievement of Sustainable Development Goals (SDGs).

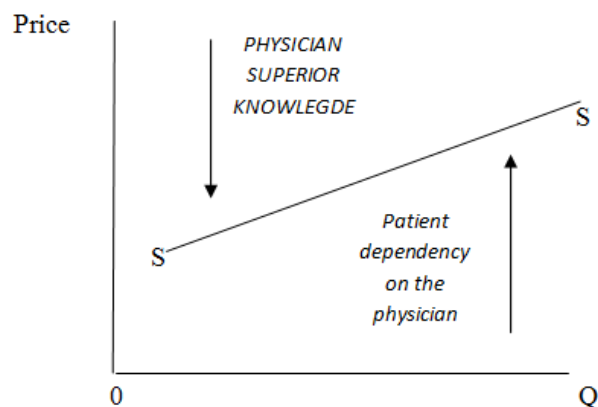
On the one hand, the handling of non-communicable diseases, such as heart disease, stroke, diabetes, cancer, and kidney is very costly. Similarly, economic pressures, workload, poor urban planning, difficulty of getting a job in the village, and the chronic diseases suffered have cause the people stressed, thus resulting in unfavorable labor productivity, social disruption and increased severity of disease. On the other hand, if there is no good control, the cost of health and the country's economic burden may reach thousands of trillions of IDR per year, then the nation's productivity will be low and the opportunities to become developed country through demographic bonuses will also be threatened. The public health expenditure that goes beyond the annual economic growth would be an opportunity of investment in pharmaceutical and medical equipment industries, in the establishment of new or expansion of hospitals, clinics, laboratories, and others to offset the increase in the number of patients every year, both communicable diseases and non-communicable diseases, and to avoid an increase in medicine prices and hospital costs. The sales value of the domestic pharmaceutical industry in 2014 was 36.4 trillion IDR and foreign pharmaceutical industry was IDR 15.6 trillion, or totaling IDR 56 trillion. The sum will continue to rise as the pharmaceutical and medical equipment industries have been set to become the mainstay industries and priority industries until 2035.

## II. LITERATURE REVIEW

Basically, market is formed because there is a balance of demand and supply. There are many factors that affect the demand and supply in the market. Demand is influenced by the income, taste, price of items, scale of preference, and others. Meanwhile, supply is more influenced by the use of factors of production, such as raw materials, auxiliary materials, labor, technology, capital, and others.

Healthcare market has been experiencing rapid growth due to advances in science, medical and pharmaceutical technology, increased public revenue, increased public awareness on the health, better health services, and the implementation of National Healthcare Insurance (JKN) through the Social Security Administrators (BPJS). Excess demand for health services in Indonesia is mainly due to economic pressures, poor nutrition, poor and unhygienic environment, lack of knowledge about health, and the increasing number of patients with infectious and catastrophic disease. The number of pharmaceutical and medical equipment industries, hospitals, specialists, and others is still inadequate. Upper middle-income communities tend to require more services, such as VIP / VVIP rooms, high-quality medicine, quick service, and competent doctors. Conversely, poor and lower-income communities rely more on the Healthy Indonesia Card (KIS) and Social Security Administrators (BPJS), for both outpatient and inpatient.

Public health spending is also affected by the amount of savings owned, loan, sales of personal property, the awareness of health and daily lifestyle. Meanwhile, additional supply tends to slow down because of the lack of capital for investment, the amount of taxes borne, and unfavorable economic conditions causing the healthcare costs to be extremely expensive. The government, with the support of the budget from tax revenues and non-tax revenues, also faces limited health budget allocation each year.



**Figure 1:** Relationship between Physician and Patient

**Source:** [http://en.wikipedia.org/wiki/Supplier\\_induced\\_demand](http://en.wikipedia.org/wiki/Supplier_induced_demand) in Tri Wahyuni Kusumawati, 2014

Charles Phelps (1997) explains that 30% of patients, with fee for service payment system to the doctor, are scheduled to make a return visit, in which more than 50% of the usefulness of the medical care provided is questionable. Liao and Cheng Chia (2001) explain that some physicians utilize the additional services to further increase their income. Christian E. van Dijk (2012) suggests that there has been a moral hazard by doctors as a result of supplier induced demand made on fee for service payment system.

The supply curve becomes stiff and the doctor seeks to shift the patient demand curve to the right so that the price to be increased (La Belle, nd). The doctor assures the patient to increase the use of medical

treatment without lowering the price set (Ricardson, 1999). Additional treatments will affect the well-being of patient (J.Ahmed, 2009). Additional service in developing countries is easy because of the asymmetry of information between doctors and patients that implies domination of the doctors in decision making. Disruption in the agency relationship occurs when doctors encourage patients to consume more than they need for their medical problems, and doctors actually know that it has minimal benefit (Folland, 2012, in Tri Wahyu Kusumawati, 2014).

The instinct to survive makes the people always want to live healthily and strive to find the cause of various diseases affecting them. Interaction of people's behavior with the environment can cause health problems or disease, and the incidence of a disease is actually rooted in the ecosystems and cultures in the region. Disease is basically the result of the interactive relationship between human beings and behavior on the one hand, and the habits with the components of the environment on the other hand. Factor of population may affect the transmission or transfer of disease from one person to another, in addition, waste production could adversely affect the human. Lack of supervision has made some producers add additives, such as preservative and coloring material, and expired material to foods and beverages that could cause health problems and socio-economic losses.

Quality is the desire to satisfy, and satisfaction is basically a sense of pleasure or disappointment over the performance of the product produced. The relationship between both of them can explain the acceptance or refusal of medical service. According to Berry, et al., 1990, in Purnomolastu (2011), there are five (5) factors that affect the quality of service: (1) tangibility; (2) reliability; (3) responsiveness; (4) assurance and, (5) empathy. Stages to examine the relationship between performance and customer satisfaction can be started from the expectations prior to treatment, performance or products, the expected meeting and its performance, and performance assessment. Furthermore, the tabulation of the responses of the patients will produce an index number, that is, Customer Satisfaction Index which shows the level of patient satisfaction with institutions and health products.

### **III. RESEARCH METHODOLOGY**

This study uses qualitative descriptive method because it analyzes the condition of the existing problems and health phenomenon in Indonesia economically. The method used in this study is focused on interpretive natural condition, observations and interviews that become the key of this research. Researchers seek to capture, record, interpret and review information by always adhering to in-depth and comprehensive data collection analysis. In addition, the researchers also draw up the level of patient satisfaction by comparing the patient expectations with the performance of healthcare industry in the context of preparing the development strategy and the recommendations related to the results of the study.

Literature review is important for the deepening of the study in order to explain the phenomenon and examine previous studies to demonstrate the linkages between the research being done and the previous one. This qualitative study is based on triangulation data derived from interviews, participatory observation, and review of data from the Ministry of Health of the Republic of Indonesia, Surabaya Health Department, and Social Security Administrators (BPJS)

The level of patient satisfaction with the healthcare industry is obtained from a survey of 100 respondents or inpatients 5-10 days in the hospital by means of comparing the patient and family expectation with the health providers in respecting the patient selection, obtaining accurate and objective information, and discussing to choose and make strategic decisions so as to create a mutually beneficial relationship between both parties.

### **IV. RESEARCH FINDINGS AND DISCUSSION**

The case of catastrophic disease in Indonesia tends to increase sharply every year due to the lack of public awareness of controlling blood sugar level, changing in pattern of life, and low compliance in taking medication. People in big cities prefer to consume foods containing high carbohydrate and are fond of fast food. They often go to cafes and restaurants to enjoy menu with high fat and sugar and colored drinks.

Regulation of the Minister of Health of the Republic of Indonesia Number 30 of 2014 on the Inclusion of the information on the content of sugar, salt and fat and health messages for processed food, and establishment of normal limit of sugar, salt, and fat intake for fast food. The regulation is intended to educate the public in order to be smart in controlling food intake and reduce the risk of non-infectious diseases. People with sugar intake more than 50 grams, sodium or salt more than 2,000 milligrams, and total fat 67 grams per day will have a higher risk of hypertension, stroke, diabetes, and heart attacks. High level of sugar, salt and fat in the body, in a certain period of time, will interfere with the work mechanism in the vascular system, and initially it will be visible from obesity.

**Table 1:** Prediction of Catastrophic Disease Cases in Indonesia

Year	Inpatient ( X Patient)	Outpatient ( X Patient)
2014	1,901,805	1,359,013
2015	2,277,367	1,627,387
2016	2,690,660	1,922,72
2017	3,112,908	2,224,458
2018	3,543,801	2,532,370
2019	3,783,861	2,703,915

**Source:** Ministry of Health of the Republic of Indonesia, 2015

The changing pattern of disease caused by economic progress and increasing life expectancy in big cities and small towns is relatively the same. The main cause is the equal distribution of unhealthy food and beverage products and the consumption of drugs and herbal medicine without the doctor's knowledge. This indicates that the pattern of life cannot be separated from changes in the demographic structure and changes in the social structure of society.

The economic burden for handling catastrophic disease in Indonesia in 2014 was very big, both for outpatient and inpatient, in which 8.1% of cases absorbed 30% of the budget for outpatient, and 28.2% of cases absorbed 33.5% of the budget for inpatient. The sum charged did not include BPJS financing, treatment cost payment by the patient during in hospital, and the cost charged for patients treated with primary health care facilities.

**Table 2:** Catastrophic Disease Cost Burden, 2014

Disease	Outpatient		Inpatient	
	Case	Cost (IDR)	Case	Cost (IDR)
All Diseases	12.76 million	3.45 triliun	2.61 million	12.66 triliun
Catastrophic Disease	1.03 million	1.03 triliun	735.827	4.24 triliun
Catastrophic Cost Burden	8.1 %	30%	28.2%	33.5%

**Source:** Ministry of Health of the republic of Indonesia, 2015

The number of people with DM (diabetes mellitus) in a number of countries, including Indonesia, increases every year and it is quite alarming, given the prevalence of 5.7% in 2007 and 6.9% in 2014 or as many as 12.2 million people. The number of patients with DM, both diagnosed (30.4%) and not diagnosed (69.6%), results in the state economic burden and the number of people with DM is getting bigger every year. In its report, WHO estimates that losses due to DM in the world from 2010 to 2030 can reach 1.7 trillion US dollars of global GDP, and for the patients, it leads to decreased productivity, disability and premature mortality. The decreased productivity and economic burden greatly affect the patient's family. Based on the data from the World Economic Forum's publication in April 2015, the potential loss due to non-communicable diseases in Indonesia from 2010 to 2030 is US\$ 4.47 trillion or 5.1 times as much as the GDP of Indonesia in 2012. The National Health Insurance (JKN) claim coming into BPJS Healthcare in 2015 was more than IDR 5 trillion for the treatment of heart disease and dialysis as general complication of the patient with diabetes mellitus.

Less healthy lifestyle is also demonstrated by the increasing prevalence of tobacco consumption, for both male and female. The prevalence of smoking in male is 66% and in female is 2.3%, in which 300,000 households show the average cigarette consumption of 10.5 cigarettes per day. The results of the Global Adult Tobacco's survey in Indonesia (2011) show that for the age of fifteen up has the prevalence of smoking in male 67.4%, and in female 4.5%. WHO (2015) reported that the incidence of lung cancer in men in Indonesia was 25,332 people, with a death rate of 21.8% per 103,100 people. The incidence of lung cancer in women was smaller or 9,374 people, with a death rate of 9.1% per 92,200 people. Li Zhang (2016), a Professor of Medical Oncology, Sun Yat University (Kompas, April 29, 2016) explains that lung cancer is the trigger of death in men, and more than half of lung cancer patients in the world are in Asia. In 2020, East Asia and Southeast Asia will face NSCLC lung cancer or non-small cell with mutations in the Epidermal Growth Factor Receptor (EGFR).

In Indonesia, DM is now the third largest cause of death after stroke and coronary heart disease. In 2014, the percentage of death from diabetes and complications was 6.7%, coronary heart disease 12.9%, and stroke 21.1% (Sample Registration Survey, 2014). Calculation of the World Economic Forum (2015) mentions that five types of non-communicable diseases in Indonesia, namely cardiovascular, cancer, tuberculosis, diabetes, and mental health disorders between 2012 and 2030 lead to a loss of US\$ 4.47 trillion, or IDR 58,000 trillion in the exchange rate of US\$ 1 = IDR 13,000 or comparable with 232 million per person. At the same period, in India, with more number of people (five-fold as many as Indonesian people) has equivalent to IDR 56.000 trillion.

Furthermore, related to infectious disease, tuberculosis (TB) is the leading cause of death in Indonesia, reaching 67,000 deaths per year. Ministry of Health data show that the prevalence of TB in 2014 was 647 people per 100,000 people, and down to 30% compared with the condition in 1990 as many as 1,045 people per

100,000 people. The mortality rate also dropped to 41 cases per 100,000 people in 2014 from 65 cases per 100,000 people in 1990. Patient with regular stage of TB must take medication for 6-9 months without a break with the cost per case from IDR 400,000 to IDR 1,200,000. Unfortunately, the patients tend to be indisciplined in taking medications, in which it can trigger TB germs to become resistant to the regular TB drugs resulting in more expensive treatment cost, or as much as IDR 100 million per case with a 50-70% chance of recovery only. If therapy is not successful then the treatment cost could reach IDR 300 million -1 400 million per case with a chance of recovery of 10-30%. (M. Subuh, the Ministry of Health, 2016)

The surge in public demand for health services, both basic and premium services, makes BPJS experienced a deficit of IDR 1.93 trillion in 2014, given the magnitude of the cost of benefits in the form of promotion, prevention, curative, and rehabilitation fees. The research findings show that BPJS participants are often excluded from those who pay with their own money, and many participants have to queue up to 3 months to obtain health service, such as dialysis. Even some health facilities are reluctant to accept BPJS patients. The difference in service rate between private hospital and government hospital in *Indonesia Case Base Groups* (INA-CBG) is only 5%. It seems to be so insignificant that many private hospitals have not been keen to join and cooperate with BPJS. Health experts say that the significant difference should be 30% so that private hospitals are able to survive in the system of National Health Insurance (JKN), able to grow and improve health services for the patients.

An increase in sales of pharmaceutical products and generic medicines in Indonesia from 2010 to 2015 was quite good and promising, considering that the implementation of the National Health Insurance (JKN) system, with BPJS as the administrator, has been running though it still has not met the public expectations. The coverage of BPJS Healthcare in 2014 was about 40-50% of Indonesia's population and is targeted to be 100% of the population, or as many as 250 million people, in 2019. Total health care spending in 2010 amounted to IDR 168 trillion, and it was estimated to reach IDR 343 trillion in 2016 (Business Monitor International, 2015)

The number of hospitals in Indonesia has increased to 40.56% in the last 3 years, with an average increase of 13.78% per year. The addition of hospital beds is in line with the increasing number of hospitals in order to meet the high number of people requiring inpatient services. Frost & Sullivan (2015) predicted that there would be an addition of 35,000 new beds in 2020, and the medical device market would grow 12.5% per year until 2018. Geographically, the majority of hospitals are located in Java Island, such as Jakarta, West Java, Banten, Central Java, Yogyakarta and East Java, while in outside Java, the concentration is in North Sumatra and South Sulawesi. Similarly, the location of doctors is in line with the location of the hospitals, in which most of them are in big cities and medium towns.

Pharmaceutical industry, as the supplier of the needs of hospitals, health clinics and pharmacies has already been successfully producing innovative products or patented medicines for chronic diseases, such as cancer, hepatitis, and diabetes. However, the majority of the medicines existing in the list of JKN electronic catalogs are generic medicines. Patients, with excess income, hope to be able to choose patented medicines by paying the difference in cost. This means that it requires a mechanism so that the patients can pay the difference in cost to obtain better or quality medicine. The medicines resulting from innovations are generally in the form of patent or are just produced from the development research of previous medicines for the same disease, while generic medicines are manufactured according to the formula of the old medicines whose patent already expired. As an illustration, the patient can be handled more quickly using patented medicines and inpatient time becomes shorter. Actually, the price, either expensive or cheap, of medicines consumed by the patient is not a determinant of health service cost efficiency, but it will become inefficient when the treatment time in hospital is longer.

BPJS finds that the medicines included in National Formulary or the list of JKN medicines and electronic catalogs are selected by experts by considering the efficiency and effectiveness of the medicines for the interests of patients. BPJS Healthcare has no authority to determine the medicines used in hospitals, as long as the medicines are in accordance with the diagnosis of the disease. The hospitals are not prohibited, too, from using the medicines outside the electronic catalog as long as the entire health service costs do not exceed the INA-CBG rate and the patient does not need to pay the extra fee. The application of INA-CBG package rate requires the hospital management to be able to streamline costs and optimize the hospital financial management, including in terms of quality control, cost control, and access through the calculation of service charge of each clinical pathway based on the calculation of cost unit owned by the hospital.

**Table 3:** Market of Pharmacy and Generic Medicine in Indonesia

Year	Sales of Pharmaceutical Product ( x Bn USD)	% of GDP	Sales of Generic Medicine ( x Bn USD)	% Number of Medicine Sales
2010	4.00	0.57	1.58	65.8
2011	4.58	0.56	1.83	67.3
2012	4.85	0.56	2.00	68.7
2013	5.88	0.56	2.50	70.2
2014	6.61	0.54	2.89	71.7

2015	7.4	0.53	3.32	73.1
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Description: CAGR Product & Pharmacy 2011–2015:13%, and CAGR Generic Medicine 2010–2015:16%

Source: **G P. Farmasi, 2016**

The sales of pharmaceutical products and generic medicines from 2010 to 2015 showed a fairly moderate increase in line with the increase of the number of patients, and contributed 0.53% to the GDP. Market of pharmacy and medicine in Indonesia is very large, but in the circulation of distribution indicates that the drug and medicine control system is still very weak resulting in the abuse committed by those who want to rake in huge profits from the trade of medicines, such as the disclosure of the case of the circulation of fake vaccines, and high-dose medicines which are traded freely by individual or entity who is not entitled to or violates the rules. Such condition causes the nation's health to be mortgaged and the sustainability of the National Health Insurance (JKN) program is threatened. Food and Drug Administration (BPOM), in cooperation with the International Crime Police Organization (ICPO), launched Pangea Operation IX in 32 provinces in Indonesia from May 30 to June 7, 2016 and found 1,312 items of illegal pharmaceutical products, including fake products with economic value reaching more than IDR 56 billion.

Pharmaceutical industry business prospect in Indonesia is very conducive along with the increasing Indonesian macro-economy and the seriousness of the government to improve all business aspects, as reflected in the economic policy packages I - XII. National industry turnover in 2014 amounted to IDR 36.4 trillion and foreign-owned pharmaceutical industry amounted to IDR 15.6 trillion, or totaling IDR 56 trillion. Most of the pharmaceutical industries in Indonesia are on the island of Java and in the regions that have complete infrastructures, such as seaports, airports, toll roads, telecommunication networks, electricity, and others in order to reduce logistics costs, approaching the availability of labor and proximity to potential markets, such as Jakarta and Surabaya.

The rapid development of pharmaceutical industry has not been followed the cheap medicine price. This is mostly caused by unfair business competition and no determination of the *highest retail price* (HET) for patented medicines, except for generic drugs. Until now, patented medicines and unbranded generics still have not had the price limit yet resulting in the unfair escalation of the medicine price, and the medicine manufacturers tend to market the medicine with different approaches or trading strategies, such as dealing directly with physicians and providing interesting remuneration. Similarly, the manufacturers allegedly play the game with certain pharmacies, giving rise to unfair competition at the retail level through discounts, so that the medicine prices to be cheaper than other pharmacies.

A number of pharmaceutical companies have recorded a good performance and made the stockholders enjoy salaries and dividends, such as PT. Kimia Farma Tbk which was able to achieve a net profit of IDR 234.6 billion in 2014, or an increase of 9.3% from IDR 215.6 billion in 2013. The profit increase was driven by an increase in the revenue rate from IDR 4.3 trillion in 2013 to IDR 4.5 trillion in 2014 and created net profit of IDR 2.06 trillion, or increased 7.5% from the previous year of IDR 1.91 trillion. The net sales of PT. Kalbe Farma Tbk increased from IDR 16 trillion in 2013 to IDR 17.36 trillion in 2014. Overall, pharmaceutical market in Indonesia grew from IDR 53.8 trillion in 2013 to IDR 58.2 trillion in 2014.

One cluster of healthcare industry in Indonesia that is experiencing rapid growth is the hospital industry, both organized by the local government or state-owned and organized by private enterprises. However, lack of supervision and indecision of government have caused many hospitals in Indonesia to have no accreditation. Less competence doctors may result in the dissatisfaction of patients and their families, such as malpractice cases and abandoned patients which result in the enmity between patients and hospital.

Geographically, most hospitals are located in Java, such as in Jakarta, West Java, Central Java, East Java, Banten and Yogyakarta, while outside Java are in North Sumatera and South Sulawesi. The distribution of doctors is also in accordance with the location of the hospitals, that is, in Java and the big cities. Referring to the calculation of ideal physician workload set by the government, the actual ratio of one doctor for 2,500 residents has actually been exceeded. The ratio is calculated based on the population with the assumption of 20 patients, size of area, workload, and service timing. According to the data from the Indonesian Medical Council (KKI) per May 9, 2016, there are 110,720 doctors in Indonesia, which means that one doctor serves 2,270 people. The government target of one doctor for 2,500 people or 41 doctors for 100,000 people was achieved in 2015, and the target of one doctor for 2,000 people is expected to be reached in 2025. It is projected that Indonesia will have a population of 285 million, so with the ratio of one doctor for 2,000 people Indonesia will need 142,500 doctors. The target will be met in the next 4-5 years, as long as the production of doctors remains as it is now, from 7,000 to 8,000 per year.

It should be noted that the distribution of doctors in Indonesia seems very uneven across provinces, for example, the distribution of doctors between Jakarta and NTT is quite unbalanced. The ratio of one doctor for 2,500 people still cannot be implemented evenly because each province has different circumstances. In West Java, Central Java and East Java, for example, the target has been unmet because the population is too large, while in Eastern Indonesia, the target is difficult to meet because of the spacious area, limited

infrastructure, and remote population. So, the problem is not related to the number of doctors available but the uneven distribution. The target is even more difficult to meet in the remote areas, such as Sebatik, Tarakan, Malinau, Tanjung Selor, Papua, West Papua, and West Sulawesi.

Based on the information, of the 9,731 health centers in Indonesia, 5% of them have no doctor at all, and 9% have doctors but living very far away from the health centers which are located in remote areas. So it can be said that it is not because of the fewer number of doctors available, but rather on uneven distribution of the doctors. In addition, doctors tend to work in areas that can provide better welfare, including adequate facilities and infrastructure, to support the profession. There are only few specialist doctors and dentists in Indonesia because being a doctor requires enormous costs and a long-time study. Most specialist doctors / dentists settle in big cities. Today and in the future, the most needed effort is to maintain professional standards and competence standards of Indonesian doctors so as not to experience the condition as occurred in the Philippines where the salary of a doctor is so low that he prefers to work in the United States though only as an assistant physician or other health professional because his competence is not recognized by the United States.

Judging from the increase in the number of disease cases and public revenues, the prospect of healthcare business in Indonesia is excellent and promising. Pharmaceutical and health industries are the mainstay of industrialization until 2035. The priority of pharmaceutical and cosmetic industries is divided into three stages: from 2015 to 2019; from 2020 to 2024; and from 2025 to 2035. The priority of pharmaceutical and cosmetic industries in Indonesia can be realized if there is development, control, and utilization of industrial technology to improve efficiency, productivity, value added, competitiveness, and the independence of the national industry.

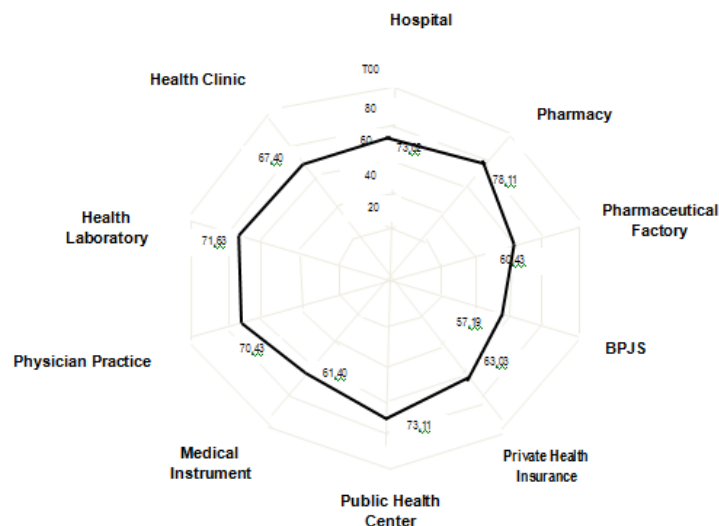


Figure 1: Level of Patient Satisfaction with Pharmaceutical Industry

Source: Researchers 2016

Relating to the need of hospitals, laboratories, medical equipment and pharmacy, it can be illustrated that the number of cancer patients in Jakarta has increased drastically. Every year 18.6% of women in 100,000 people in Jakarta are contracted breast cancer. There are currently 10,000 new cases in Jakarta, 7,000 cases of which have entered advanced stage of cancer. Patients with BPJS Healthcare facility have to wait in line for 2-3 months for radiation treatments or chemotherapy, whereas patients with advanced stage always race against time. Another problem is that most palliative patients occupy hospital bed because they require mental and spiritual supports, pain relievers, and comfort to die in dignified way, whereas patients with curative care also require the hospital beds. Result of the illustration explains that Indonesia really needs a lot of hospitals with all complete facilities, a number of competent health personnel, and affordable medicine price, as well as a good service standard. The number of health facilities and doctors is still very few and not in accordance with the ideal ratio.

The level of patient satisfaction with the pharmacy is quite high because the programs of consultation, information, and education have gone so well that the patients understand how to use and the efficacy of medicine, as well as the medicine price. Since the enactment of BPJS, many patients, who come to the hospital for treatment, have to wait in a long queue, but they have a significant trust to the hospital and they seem satisfied with the hospitals that have implemented health services with a focus on patient. The level of patient satisfaction with BPJS has not been high enough because of the limited capacity and medical devices in hospitals, including the ratio of doctors which is not adequate for areas outside major cities. The level of patient

satisfaction with the pharmaceutical industry is focused more on the high price of medicine that is often unaffordable by most people, let alone the patient should consume imported medicines. The level of patient satisfaction with physician practices is quite high, but dissatisfaction appears when doctors fail to give information on the illness of the patient and the prescription to be bought in pharmacies.

The level of happiness of Indonesian citizens in 2014 was 5.348, or ranked number 76 in the world, where the level of life satisfaction in terms of the health aspect was 69.72 or improved 3.32 compared with 66.40 in 2012. Health is one measure of the welfare of Human Development Index. In the future, the level of life satisfaction in terms of health aspect should be increased in order to be equal with the neighboring countries, such as Singapore, Malaysia, and Vietnam, by constantly improving the service quality of hospitals, laboratories, clinics, and pharmacies although the government still imposes a low cost, considering that consumer is an important and strategic factor in the health business. In the perspective of the patients and their family, the most important issue is transparency in the cost, quality, outcome, and retailing of health service that become response to the needs of consumers. The health business actors who are able to survive are not the strong ones, but those who are brave and adaptable to any changes.

## V. CONCLUSION

Cases of catastrophic diseases in Indonesia, both outpatient and inpatient, have increased dramatically resulting in the economic burden of the state and the family every year. The number of such cases even surpassed India which has a population of five times as much as the population of Indonesia. The high cases of patient's illness turn out to be caused by unhealthy lifestyles, false consumption patterns, lack of exercise, economic pressures, workload, poor urban planning, and chronic disease affected. These all cause people to experience stress, social disruption and decreased work productivity. Patient handling requires enormous costs, in which up to now the costs have not been fully protected even though the National Health Insurance (JKS) has been working to bear part of the costs of treatment, so the patients and families have to incur additional costs for the unavailable medicines with lengthy waiting lists.

The health business prospect in Indonesia is very excellent and favorable, such as in the fields of hospitals, pharmaceutical industry, polyclinic laboratory, medical equipment industry, and pharmacies. Unfortunately, it is followed by the low price of medicines because of unhealthy competition and no determination of the highest retail rate for the medicines, unless the generic medicines. Lack of supervision and indecision of government cause a lot of hospitals to have no accreditation and competent doctors resulting in the dissatisfaction of patients and families.

The government should facilitate the development and the establishment of pharmaceutical raw materials industry for import substitution and strengthen the health infrastructure in an effort to implement the Indonesian Pharmacopoeia standards for the pharmaceutical industry, including the establishment of large-scale and export-oriented pharmaceutical industry. The development of upstream petrochemical sector to reduce dependence on imported raw materials, the establishment of internationally standardized manufacturing capabilities and the establishment of accredited clinical testing laboratory are urgently needed.

## ACKNOWLEDGEMENTS

This research supported by Surabaya University in Surabaya, Indonesia. Thank you for the supporting of reviewer of this research.

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