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Research Article

### **Economic Review Medical Staff Behavior**

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#### **Abstract**

In the Circular Flow model, the term input market is popular, including the labor market needed by the business entity to produce services or goods. By referring to this model, doctors are one of the inputs for the hospital. In reality, there will be a market for doctors according to economic principles. If there is economically normal behavior, in principle, the greater the income or salary offered by the market, the more doctors will enter the market. Analysis of the medical labor market is crucial in hospital management. Various economic models of hospitals state that the role of medical staff (doctors) is dominant. This is understandable because the doctor, especially the specialist who determines the level of utilization and the level of hospital charges. Broadly speaking, doctors in the hospital are divided into three major groups, namely: (1) specialist groups who have great clinical ability and authority and have a strong influence on medical and paramedical staff; (2) general practitioner group who usually have more role as doctors in the admissions department; and (3) groups of doctors who serve as directors or structural staff of the hospital. The discussion in this section is more about specialist doctors.

**Keywords:** economic, government, hospital, patient, doctor

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## 1. Introduction

The economic aspect is only one of the various factors that make doctors feel uncomfortable living in remote areas [1]. In terms of economic factor, specialist doctors stated that (1) the incentives received were still insufficient and often paid late [2]; (2) the medical services received are too small and the distribution system is also vague [3]. The hospital must have

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standard rules in distribution and must have a service delivery assessment system [4]. (3) the regional regulation on tariffs for specialist doctors at regional general hospital (RSUD) Y is still too small due to an error in the manufacturing system [5].

Data on the number of specialist doctors in Indonesia suggested a very concerning situation. According to data from the Department of Health of the Republic of Indonesia, in Indonesia, there were 1117 public and private hospitals. There were 19,671 doctors worked and 5971 general practitioners, while the number of residents were 4100 and 9600 specialists.

The distribution of doctors are mostly in Java than outside Java. In Special Region of Jakarta (DKI Jakarta), there are 2397 specialist doctors (24.9% of the total specialists in Indonesia). As an illustration, there are 487 oculists. In Special Region of Jakarta there are 124 people, 63 people in West Java, 52 people in Central Java, 19 people in Yogyakarta, and 73 people in East Java. Thus, about 67.9% of the total oculists are in Java. Especially for subspecialists, they are distribution unevenly. For instance, there are 64 nerve surgery specialty in Indonesia; 18 doctors are in Special Region of Jakarta and 10 doctors are in West Java. In West Sumatra, there is only 1 person, while in Riau there is no neurosurgeon doctor. Papua only has 5 surgeons (1 at Freeport Hospital), and there is no anesthetist in government-owned hospitals. Anesthetists are at Freeport Hospital. In Papua, there is only one clinical pathologist specialty. In the Special Region of Nanggroe Aceh Darussalam, an anesthetist has to serve about 4 million people, while in Special Region of Jakarta an anesthetist serves 79,243 people. A nerve surgery specialty in West Sumatra serves nearly 5 million people, while in Special Region of Jakarta serves 491,356 people.

Despite being geographically uneven, the private hospitals do not have sufficient full-timer specialists. Data of Department of Health in 2000 shows that it is interesting that even the large private hospitals lack of full-time specialists. For example, Charitas Hospital as the largest hospital in Palembang has 15 permanent doctors consisting of 7 general practitioners, 2 surgeons, 1 internist, 1 pediatrician, 1 obstetrics and gynecology doctor, 1 clinical pathologist specialty, and 1 oculist. The reputable hospital, MMC, in Jakarta, has 14 doctors consisting of 9 general practitioners and 1 internist. The hospital in Christian University of Indonesia in Faculty of Medicine (FK-UKI) which is famous in Cawang as a center for handling toll traffic accidents has 52 doctors consisting of 36 general practitioners, 2 internists, 1 psychiatric specialty, 2 otolaryngologist, 5 radiology specialists, 1 oculist, 1 cardiology specialty, 1 neurologist, 1 urologic surgery specialty, and 2 dental specialists.

As a comparison, the central general hospital (RSUP) of Dr. Cipto Mangunkusumo has 1718 doctors consisting of 20 general practitioners, 884 residents, 29 dentists, 69

surgeons, 83 internists, 93 pediatricians, 68 obstetrics and gynecology doctors, 36 radiology specialty, 35 anesthetists, 22 clinical pathology specialists, 34 neurologists, 43 oculists, up to 51 dental specialists. St. Boromeus Hospital, which is the largest private hospital in Bandung, has 29 doctors, consisting of 16 general practitioners and 13 specialists. However, at Boromeus Hospital there is no anesthetist. There is only has 1 obstetrics and gynecology doctor. A similar situation is found in St. Elisabeth Semarang, Telogorejo Hospital, Adi Husada Hospital Surabaya, Surya Husada Hospital Denpasar, all of which are the leading private hospitals in their respective cities.

It seems that the data from anesthetists is less encouraging in the future. In Indonesia, there are 344 anesthetists (118 in Jakarta and 42 in West Java) who have to work with specialists who carry out the surgery such as surgeons (839 people), obstetrics and gynecology doctors (990 people), oculists (487 people), otolaryngologists (440 people), and subspecialty doctors such as nerve surgery specialty and urologic surgery specialty. The ratio between the number of anesthetists and doctors who require complementary anesthetist services is very low [6]. Then it is resulting in a low number of surgery and the type of anesthetic technology handled by anesthetists. This situation has a further impact in the form of the difficulty in developments in surgery that require the support of personnel and sophisticated anesthetic equipment [7]. Of these number, private hospitals and Indonesian Army also the Indonesian National Police (TNI-POLRI) only have around 24% of all anesthetists. A lack of anesthetist will invite foreign anesthetists to work in Indonesia.

Data on the number and distribution of specialist doctors in Indonesia indicate a crisis in the production, provision of incentives, and placement of specialist doctors. As a comparison, according to data from the Satrio Foundation in Jakarta, there are 6000 surgeons in Thailand and the Philippines, 4000 obstetrics and gynecology specialists, 5000 internists, and 3000 anesthetists. In the Philippines, a doctor who specializes in obstetrics and gynecology is even the head of the Community Health Centre.

Provinces that are economically strong but are concerned about developing specialist doctors in private hospitals are West Sumatra and Bali. This situation cannot be separated from the history of private hospitals in West Sumatra and Bali which did not have large private hospitals from the colonial era. Most of the hospitals in Padang and Denpasar were established by specialists. Using an analysis based on the Pauly and Redisch model it can be understood that this pattern reduces the increase in the number of specialist doctors in private hospitals [8].

# 2. Several Key Points in the Specialist Supply

The distribution of specialists is low in the remote areas and the place which there is no economic appeal for the placement of specialist doctors [9]. This reflects normal behavior in the labor market. The research result states that the bigger the economy in a region, the more specialist doctors are available. This relationship is significant [10]. From 26 provinces and 297 regencies in Indonesia, the analysis of various factors that are thought to play a role in the distribution of specialist doctors in Indonesia has been carried out as shown in Table 1. The factors linked are Gross Regional Domestic Product to measure the size of the economic situation in a region and the number of poor.

**Table 1.** The Relationship between the Gross Regional Domestic Product in Province Level and the Percentage of Poor with the Specialists Distribution

		Relationship with	Relationship with
No	<b>Types of Specialty</b>	GRDP	The percentage of
			Poor
1	General-Surgery Specialty	r = 0.940	r = -0.355
2	Internal Disease Specialty	r = 0.890	r = -0.358
3	Obstetrics and	r = 0.921	r = -0.332
	Gynecology Doctor		
4	Pediatrician	r = 0.894	r = -0.328
5	Ophthalmology Specialty	r = 0.919	r = -0.337
6	Otolaryngology Specialty	r = 0.902	r = -0.326
7	Psychiatric Specialty	r = 0.876	r = -0.332
8	Neurology Specialty	r = 0.890	r = -0.319
9	Genital Dermatology Specialty	r = 0.871	r = -0.321
10	Radiology Specialty	r = 0.916	r = -0.311
11	Anesthesiology Specialty	r = 0.854	r = -0.341
12	Clinical Patology Specialty	r = 0.923	r = -0.327
13	Anatomical Patology Specialty	r = 0.882	r = -0.357
14	Cardiology Specialty	r = 0,744	r = -0.340

15	Pulmonology Specialty	r = 0.858	r = -0.271
16	Nerve Surgery Specialty	r = 0.875	r = -0.355
17	Orthopedic Surgery	<b>"</b> – 0.069	r = 0.216
	Specialty	r = 0.968	r = -0.316
18	Urologic Surgery Specialty	r = 0,907	r = -0.302
19	Forensic Specialty	r = 0.812	r = -0.210
20	Medical Rehabilitation		r = 0.211
	Specialty	r = 0.856	r = -0.311

Based on the table above, it can be seen that the number of specialist doctors generally has a strong positive relationship (r>0.80) with the GRDP of an area. The results of in-depth analysis at the regency level also show the same thing, namely r>0.80 for all types of specialization areas. This means that the higher the gross regional domestic product of an area, the more specialist doctors who work there [11]. Meanwhile, if it is connected to the percentage of poor, then it obtained a negative relationship (inversely related) [12]. This means that the greater the percentage of poor in an area, the fewer specialist doctors who work in that area [13]. Indeed, the results of this data confirm that the specialist doctor profession is like any other profession, with economic factor and life welfare that are important [14].

However, the economic factor is not the only factor that make doctors feel at home working in the hospital, as illustrated in the regional general hospital (RSUD) Y. As the only hospital in X Regency, a regency in remote Sumatra, the regional general hospital (RSUD) Y is the foundation and hope of the community in getting health services, especially specialized medical services. This can be seen when there is specialist doctor, the number of people who come for getting treatment increases. Inversely, if the specialist doctor is absent, the number of people who come to the hospital for getting treatment decreases. Data in the medical records of regional general hospital (RSUD) X shows that in January 2000, the number of specialist doctors was three, the number of outpatients were 808 and inpatients were 153. Meanwhile, in February 2000, specialist doctors were not available, so the number of outpatients decreased sharply to 631 people, followed by the number of inpatients decreased to 120 people, and patients referred to the provincial capital increased to 42 people.

Generally speaking, specialist doctors who worked at regional general hospital (RSUD) Y have never completed the graduate mandatory apprenticeship. This means that they have not finished the 4-year work period (graduate mandatory apprenticeship period),

they have moved for various reasons. Data from the personnel division of regional general hospital (RSUD) Y shows that other specialist doctors have worked for 2 years and some have even worked for only 1 year. The doctors who moved was caused by the uncomfortable feeling working there.

Seeing this fact, the local government in 1999 provided various facilities to make the specialist doctors feel at home. Also, it were expected to provide job satisfaction. The facilities provided by the local government for specialist doctors are official houses, official cars, and incentives (home money) of IDR 1,500,000/month. However, the efforts made by the local government were not give a significant effect because the specialist doctors still left the hospital in South Bengkulu Regency.

### 3. Economic Factor and Job Satisfaction

Several important questions regarding this job satisfaction arise. Does economic factor play a role in this? Many problems affect job satisfaction. These problems include doctor-patient relationship, hospital facilities, relationship with coworkers, feeling safe in doing work, income earned, facilities received from the hospital, job characteristics, existence and profession recognition in the hospital, family, and career problems [15].

An important reason apart from economic factor is the problem of children's education. According to the doctor, the Y regency is lagging in terms of technological advances so that the knowledge and curiosity of children is different from those children living in big cities. Also, career path is an important consideration in whether to feel at home or not. The economic condition of poor areas is related to various other factors that make doctors uncomfortable to work. The result is an uneven distribution of doctors.

### 4. Conclusion

Another interesting thing is the fact that in big cities there is a double work of specialist doctors in private hospitals. This means that there will be time-costs for the displacement of specialist doctors, difficulties for patients to meet the specialists, difficulties for hospital managers in managing human resources, and difficulties for specialists to work in team or 'team-work'. Data on the number of specialist doctors shows that many private hospitals have a shortage of doctors so that they are taken from government-owned hospitals. In the decades before decentralization, the distribution of specialist doctors was centralized by the Indonesian Department of Health. As a result, private hospitals and local governments did not carry out the full recruitment process for specialist doctors. The next impact, a

situation that is not universally managerial because of the difficulty in managing specialist doctors. In government-owned hospitals, the hospital directors and medical committees have no autonomy in recruiting and dismissing the specialists. In some specialist fields, a small number of specialist doctors can lead to a cartel model of business. This is avoided in the United States. The reason is, if there is a cartel, the cartel member's income will be determined by the group which is not for the welfare of the community. This small number is striking in the anesthesiology specialty group.

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