

## Chief Editor

Dr. A. Singaraj, M.A., M.Phil., Ph.D.

## Editor

Mrs.M.Josephin Immaculate Ruba

## EDITORIAL ADVISORS

1. Prof. Dr.Said I.Shalaby, MD,Ph.D.  
Professor & Vice President  
Tropical Medicine,  
Hepatology & Gastroenterology, NRC,  
Academy of Scientific Research and Technology,  
Cairo, Egypt.
2. Dr. Mussie T. Tessema,  
Associate Professor,  
Department of Business Administration,  
Winona State University, MN,  
United States of America,
3. Dr. Mengsteab Tesfayohannes,  
Associate Professor,  
Department of Management,  
Sigmund Weis School of Business,  
Susquehanna University,  
Selinsgrove, PENN,  
United States of America,
4. Dr. Ahmed Sebihi  
Associate Professor  
Islamic Culture and Social Sciences (ICSS),  
Department of General Education (DGE),  
Gulf Medical University (GMU),  
UAE.
5. Dr. Anne Maduka,  
Assistant Professor,  
Department of Economics,  
Anambra State University,  
Igbariam Campus,  
Nigeria.
6. Dr. D.K. Awasthi, M.Sc., Ph.D.  
Associate Professor  
Department of Chemistry,  
Sri J.N.P.G. College,  
Charbagh, Lucknow,  
Uttar Pradesh. India
7. Dr. Tirtharaj Bhoi, M.A, Ph.D,  
Assistant Professor,  
School of Social Science,  
University of Jammu,  
Jammu, Jammu & Kashmir, India.
8. Dr. Pradeep Kumar Choudhury,  
Assistant Professor,  
Institute for Studies in Industrial Development,  
An ICSSR Research Institute,  
New Delhi- 110070, India.
9. Dr. Gyanendra Awasthi, M.Sc., Ph.D., NET  
Associate Professor & HOD  
Department of Biochemistry,  
Dolphin (PG) Institute of Biomedical & Natural  
Sciences,  
Dehradun, Uttarakhand, India.
10. Dr. C. Satapathy,  
Director,  
Amity Humanity Foundation,  
Amity Business School, Bhubaneswar,  
Orissa, India.



ISSN (Online): 2455-7838

SJIF Impact Factor (2015): 3.476

EPRA International Journal of

# Research & Development (IJRD)

Volume:1, Issue:4, June 2016



Published By :  
EPRA Journals

CC License





# FACTORS RELATED TO THE NON SPECIALIST REFERRAL RATES IN PRIMARY HEALTH CARE KOTAWARINGIN TIMUR DISTRICT

**Yunita Indra Normala Sukmawan<sup>1</sup>**

<sup>1</sup>Master of Public Health Science Study Program, Faculty of Medicine,  
Lambung Mangkurat University, Kalimantan  
Selatan Province, 70714, Indonesia

**Husaini<sup>2</sup>**

<sup>2</sup>Master of Public Health Science Study Program, Faculty of Medicine,  
Lambung Mangkurat University, Kalimantan  
Selatan Province, 70714, Indonesia

**Lenie Marlinae<sup>3</sup>**

<sup>3</sup>Master of Public Health Science Study Program, Faculty of Medicine,  
Lambung Mangkurat University, Kalimantan  
Selatan Province, 70714,Indonesia

## ABSTRACT

Some 80% disease which treated by referral hospital is a disease that should be treated by primary health care. Non specialist referral rates from primary health care to Murdjani Hospital in Kotawaringin Timur is 22% or above the tolerance limit of the reference non specialist that has been set (15%) by Health Minister Regulation. This shows the implementation of health care referral system in Murdjani Hospital, both primary health centers, clinics and physicians practices has not run optimally. This research is aim to identify factors related to the non specialist referral rates in primary health care Kotawaringin Timur District. The research use cross sectional method. The population was all primary health care in collaboration with Health BPJS Sampit Branch Office as partners who totaled 38 primary health care. Samples were taken using a quota sampling was 37 primary health care. The results is the ability of health workforce have a significant relationship to the non specialist referrals. There is no correlation between the availability of health workforce with non specialist referrals. The availability of health infrastructure and facilities has a significant relationship to the non specialist referrals. The availability of drugs has a significant relationship to the non specialist referrals. The commitment of health services has not relationship to the non specialist referrals. The conclusion is the ability of health workforce, the availability of health workforce, the availability of infrastructure and facilities, the availability of drugs, and health care commitments simultaneously affect the non specialist referral rates.

**KEYWORDS:** Health workforce, infrastructure and facilities, drugs, service commitments, non specialist referral

## INTRODUCTION

Health is a basic right of the individual and every citizen has the right to get health services. Rising health care costs make it difficult for public access to health services needed. Increased costs that threaten access and quality of care. Health financing problems lead to increased funding for health in order to meet the necessary funding comes from the community itself as a gotong-royong to share the risk of health problems in the form of health insurance as Law No. 40 of the National Social Security System (Navigation) in which health insurance is a priority program which will be developed. The National Health Insurance Program (JKN) developed in Indonesia is part of the priority programs of the National Social Security organized through social insurance mechanisms so that all Indonesian citizens are protected in the insurance system as the fulfillment of basic needs of health (Thabrany, 2014).

The mandate of Law No. 40 of 2004 about Social Security (SJSN) and Law No. 24 of 2011 about Social Security Agency (BPJS) determined that JKN implemented by BPJS commencing on January 1, 2014. The management of the JKN program by BPJS Health need support from various parties, one of them from health facilities partners who serve JKN participant (MoH RI, 2014).

Each JKN participant have the right to receive health care include health services First Level Outpatient (FLO), Inpatient First Level (IFR), Health Services Outpatient Advanced Level (HSOAL), Inpatient Advanced (IA), emergency services, and other health services established by the minister through a referral system. Health care in JKN program administered by BPJS given in stages, effectively and efficiently by applying the principles of quality control and cost control (Naiborhu, 2011).

JKN participants are required to follow the procedures in accordance with applicable regulations to be able to utilize the BPJS Health program. One of them through tiered referral system that integrated with each other. This tiered referral system relying on primary health care that serves as a gatekeeper, which each case referred to the advanced facilities should be selected first in the First Level Health Facilities (primary health care). Health services implemented in stages starting from health care first, second and third can only be provided on a referral from the health service level unless the state of emergency, the specificity of health problems of patients, consideration of geographical limitations of specialists and consideration of the availability (Ningrum & Huda, 2014).

The referral system put in place because of the high number of patient referrals from primary health care to health care referral advanced (HCRA) which should be completed in primary health care. The high number of references in primary health care to HCRA has resulted in many queues at the Hospital as HCRA, where HCRA should only deal with patients who really need further examination and treatment. Factors that affect the high referral rates

among others due to the ability of health workforce, availability of health workforce, infrastructure and facilities, drugs and service commitment in primary health care (Thabrany, 2014).

Pattianakotta (2012) reported 80% treated disease in referral hospital in North Maluku province is a disease that should be dealt with at the health center. Based on preliminary studies in May 2015 which has been done in Murdjani Hospital, Sampit (Kotawaringin Timur District) indicate referral rates non-specialist from primary health care to HRCA above the tolerance limit of the reference non-specialist that has been set (15%) by Health Minister Regulation No. 1 of 2012 is 22% were supposed to be completed in primary health care. This proves the implementation of health care referral system in Murdjani Hospital of primary health care both health centers, clinics and physicians practices has not run optimally, one of the cases that should be completed in primary health care still referred to Murdjani Hospital. Based on this background necessary the research related health workforce ability and availability, infrastructure and facilities, drugs and services commitment to non specialist referral number of BPJS patients in Murdjani Hospital, Sampit in 2015.

## METHODS

This research is quantitative research with cross sectional approach. The study was conducted in Murdjani Hospital as HRCA partners in the work area BPJS Sampit Branch Office in December 2015. The population in this study are all primary health care which collaboration with BPJS Sampit Branch Office as partners which totaled 38 primary health care. Samples were taken using a formula samples (N-1), in order to obtain a sample with the number 37. The independent variables consist of the ability of health workforce, availability of health workforce, availability of infrastructure and facilities, availability of drugs, and service commitments. The dependent variable in this study is a non-specialist referral from primary health care to hospital. Instrument of research is credentialling primary health care assessment. Credentialling used to determine the capacity and quality of health facilities which will cooperate with BPJS.

## RESULT AND DISCUSSION

### 1. Relationship Ability of Health Workforce with Non Specialist Referral Rates

The ability of health workforce is the competence of health workforce who sue doctors and other health workforce to have a better ability to handle the patient well and thoroughly in basic health facilities. The ability of health workforce is one of the things that affect referral rates in HRCA, including non-specialist referrals (Hoffman, 2015).

According to research Amaniah (2009), 75% of health workforce of primary health care in Indonesia have not been trained to increase the competence of health due to limited funding and lack of involvement of the local health office in carrying out capacity building of health workforce (Amaniah, 2009). Here are the results of statistical tests.

**Table 1 Relationship Ability of Health Workforce with Non Specialist Referral Rates**

Ability of Health Workforce	Non Specialist Referral				Pearson correlation	
	Good	Enough	Less	Bad	Value	Sig.
<b>Good</b>	2 5.4%	0 0%	2 5.4%	4 10.8%	-0601	0000
<b>Enough</b>	0 0%	2 5.4%	7 18.9%	0 0%		
<b>Less</b>	0 0%	4 10.8	1 2.7%	5 13.5%		
<b>Bad</b>	1 2.7%	2 5.4%	0 0%	7 18.9%		

In Table 1 above shows if the good ability of health workforce in primary health care will result rates 5.4% of non-specialist referrals. Meanwhile, if the bad ability of health workforce in primary health care will result rates 18.9% of non-specialist referrals. This means that if the good ability of health workforce can cause non-specialist referrals, especially if primary health care has not the good ability of health workforce. It is seen that the proportion of non specialist referral at primary health care with bad ability of health workforce is larger than the proportion primary health care with good ability of health workforce.

On the table shows the sig value (0.000 < 0.05), the decision is Ho rejected, which means there is a significant relationship between the ability of health workforce with non specialist referral rates. Pearson correlation value of 0601, the negative direction which means that improvement the ability of health workforce will decrease non specialist referral rates.

**2. Relationship Availability of Workforce with Non Specialist Referral Rates**

Kesumawati (2012) states there is a relationship between the availability of health workforce with the implementation of the first level referral outpatient of Askes Social PT Askes Sukabumi branch office in 2012. In his research Kesumawati (2012) states that in the

health centers are still many references based on non-medical indications for availability doctors are still lacking in terms of labor and time so that patient care is not optimal (Kesumawati, 2012).

Availability of health workforce in providing health services to patients is important because it is one of the main tasks of primary health care to providing health care (Suharti, 2015). The quality standards for health services are the availability of human resources or health workforce in each primary health care (Idris, 2014).

According to Lubis (2005) patients are often admitted due to limited availability of health personnel. Appropriate of Health Minister Law No. 001 of 2013 about the referral system in stages, patients are not entitled to ask in reference but should be based on the diagnosis of a disease or medical indication of the examining physician, According its law, when referred not based on medical indications and is still present in 155 diagnoses mean hospital will refuse patients. Lubis in his research concluded that inadequate health workforce in primary health care cause less of the program in primary health care services leading to high referral cases (Lopez, 2005).

**Table 2 Availability of Health Workforce Relations with Non Specialist Referral Score**

Availability of Health Workforce	Non Specialist Referral				Pearson correlation	
	Good	Enough	Less	Bad	Value	Sig.
<b>Good</b>	0 0%	0 0%	0 0%	1 2.7%	-0050	0770
<b>Enough</b>	2 5.4%	3 5.4%	2 5.4%	3 8.1%		
<b>Less</b>	1 2.7%	1 2.7%	3 8.1%	6 16.2%		
<b>Bad</b>	0 0%	4 10.8%	5 13.5%	6 16.2%		

In Table 2 above shows if the good availability of health workforce in primary health care will result rates 2.7% of non-specialist referrals. Meanwhile, if the bad availability of health workforce in primary health care will result rates 16.2% of non-specialist

referrals. This means that if the good availability of health workforce can cause non-specialist referrals, especially if primary health care has not the good availability of health workforce. It is seen that the proportion of non specialist referral at primary health

care with bad availability of health workforce is larger than the proportion primary health care with good availability of health workforce.

In Table 2 looks sig value ( $0.770 \geq 0.05$ ), the decision is  $H_0$  accepted, which means there is no significant relationship between the availability of health workforce with non specialist referral rates with a Pearson correlation value of 0.050.

**Table 3 Relation Availability Infrastructure Health Score Non Specialist Referral**

Availability Infrastructure Health	Non Specialist Referral				Pearson correlation	
	Good	Enough	Less	Bad	Value	Sig.
Good	0	0	1	0	-0633	0000
	0%	0%	2.7%	0%		
Enough	2	1	2	2		
	5.4%	2.7%	5.4%	5.4%		
Less	1	6	0	2		
	2.7%	16.2%	0%	5.4%		
Bad	0	0	1	0		
	0%	0%	2.7%	0%		

In Table 3 above shows if the good availability of health infrastructures and facilities in primary health care will result rates 2.7% of non-specialist referrals. Meanwhile, if the bad availability of infrastructures and facilities in primary health care will result rates 32.4% of non-specialist referrals. This means that if the good availability of health infrastructures and facilities can cause non-specialist referrals, especially if primary health care has not the good availability of health infrastructures and facilities. It is seen that the proportion of non specialist referral at primary health care with bad availability of health infrastructures and facilities is larger than the proportion primary health care with good availability of health infrastructures and facilities.

In Table 3 looks sig value ( $0.000 < 0.05$ ), the decision is  $H_0$  rejected. Pearson correlation value of 0.633, the direction is negative which means that the larger availability of health infrastructure and facilities will low non specialist referral.

**3. Relationship Availability of Infrastructure with Non Specialist Referral Rates**

Availability of infrastructure and facilities of health in a health measurement is a very important thing in order to achieve the enforcement of the diagnosis and the provision of appropriate action (Suhartari, 2009).

**4. Relationship Availability of Drugs with Non Specialist Referral Rates**

Most of primary health care in the procurement of drugs depends on National Drugs Formulary (FORNAS) causing high rates of referral. Requests are in accordance with the requirements, but the requested drugs is too late of coming and even up to six months special drugs from the budget of JKN program from capitation funds have not been used. It is affecting services to the public because often happens blank of drug, delivery of drug to primary health care does not comply with the request or not timely. Supposedly the procurement can be obtained from government and other sources that do not bind so the drug availability can be fulfilled in order to prevent the blank of drugs (Mosadeghard, 2014)

**Table 4. Relationship Availability of Drugs with Non Specialist Referral Rates**

Availability of Drugs	Non Specialist Referral				Pearson correlation	
	Good	Enough	Less	Bad	Value	Sig.
Good	1	2	4	0	-0745	0000
	2.7%	5.4%	10.8%	0%		
Enough	2	2	2	0		
	5.4%	5.4%	5.4%	0%		
Less	0	1	2	4		
	0%	2.7%	5.4%	10.8%		
Bad	0	3	2	12		
	0%	8.1%	5.4%	32.4%		

In Table 4 above shows if the good availability of drugs in primary health care will result rates 2.7% of non-specialist referrals. Meanwhile, if the bad

availability of drugs in primary health care will result rates 32.4% of non-specialist referrals. This means that if the good availability of drugs can cause non-

specialist referrals, especially if primary health care has not the good availability of drugs. It is seen that the proportion of non specialist referral at primary health care with bad availability of drugs is larger than the proportion primary health care with good availability of drugs.

In Table 4 looks sig value (0.000 <0.05), the decision is Ho rejected. Pearson correlation value of 0.745, the direction is negative which means that the larger availability of drugs will low non specialist referral.

**5. Relationship Service Commitment with Non Specialist Referral Rates**

The low health services commitment given by health workforce cause high referral to service patients, the lack of commitment can be seen from the

quality and delivery of services of health workforce which not meet the performance standards that have been set, such as the doctor is not there when patients require the services of doctors (Beth, 2012).

Service commitment is a principle that is in and act as a driving force to do something in order to support the success of the organization in accordance with the objectives to be achieved, including the commitment of health services at primary health care in suppressing the number of referrals. Strong service commitment to encourage health workforce trying to reach the goal of primary health care providing services to patients as optimally as possible in accordance with ministry guidelines or minimum service standards in primary health care (Hastuti, 2013).

**Table 5 Relationship Services Commitment with Non Specialist Referral**

Service Commitment	Non Specialist Referral				Pearson correlation	
	Good	Enough	Less	Bad	Value	Sig.
Good	1	0	0	0	-0249	0137
	2.7%	0%	0%	0%		
Enough	2	3	2	2		
	5.4%	8.1%	5.4%	5.4%		
Less	0	2	3	5		
	0%	5.4%	8.1%	13.5%		
Bad	0	3	5	9		
	0%	8.1%	13.5%	24.3%		

In Table 5 above shows if the good service commitments in primary health care will result rates 2.7% of non-specialist referrals. Meanwhile, if the bad service commitments in primary health care will result rates 24.3% of non-specialist referrals. This means that if the good service commitments can cause non-specialist referrals, especially if primary health care has not the good service commitments. It is seen that the proportion of non specialist referral at primary health care with bad service commitments is

larger than the proportion primary health care with good availability of drugs.

In Table 5 looks sig value (0,137 ≥ 0.05), the decision is Ho accepted, which means there is no relationship between the health service commitment to non-specialist referral by Pearson correlation value of 0.249.

**6. Multivariate analysis**

The result of regression coefficients together (F Test) presented in the following table.

**Table 6 Multivariate Test Results about Relationships Ability of Health Workforce, Availability of Health Workforce, Infrastructure and Facilities, Drugs and Services Commitment with Non-Specialist Referral Rates**

	R	R Square	F	Sig.
Multivariate test	0872	0721	19 642	0000

$F_{count} > F_{table}$  (19.642 > 2.523), then Ho is rejected, it means that the availability of health workforce, the ability of health workforce, availability of health infrastructure and facilities, availability of drugs, and health care service commitments jointly affect the non-specialist referral.

Results of multivariate statistical tests using multiple linear regression in this study shows there is a significant relationship between the ability of health workforce, availability of health workforce, infrastructure and facilities, drugs and service commitment with non-specialist referral rates, because the significance value <0.05. Figures R of 0.872 which indicates that there is a very strong

relationship between the independent variables with the dependent variable and the coefficient of determination (*Adjusted R Square*) is 0.721 means the ability of health workforce, availability of workforce, infrastructure and facilities, drugs and service commitment to give effect by 72.1% of the non specialist refferal rates, while the remaining 27.9% is explained by other variables not included in this study as the patient's condition, a reference to his own request or geographic factors. ANOVA test results have value and significance of F count 19.642 = 0 (sig. <.05). This shows the ability of health workforce, availability of health workforce, infrastructure and



facilities, drugs, and service commitments jointly affect the non-specialist referral.

These results are consistent with the results of research Senewe (1997) in Zuliana (2009) that the health service factors have a relationship with referral rates. Factor in health care, among other things include the ability of health workforce, availability of health workforce, infrastructure and facilities, drugs, service commitments, health counseling, home visits, the availability of means of transportation and distance. Meanwhile, according to Dwikanti R (2015), if taken full control of the health service through assessment or evaluation on primary health care as the gate keeper, expected referral to HRCA can be suppressed or below the limit of tolerance. According to the result in high referral non specialist due to the low completeness of medical devices as well as other supporting facilities, drugs and consumables have to remain always available in the clinic, physician clinics should have competence able to diagnose the disease completely and is able to perform the management of the patient good and right.

The current health care will be more focused on the first level of health care. This is to curb the high frequency of patients who visit the hospital. Of course, the quality of health services in primary health care becomes very important. Quality health care is largely determined by health facilities and qualified health workforce.

According to the Department of Health Education and Well Fare of USA cited in Lapau (1997), states that there are several factors that affect the use or utilization of health services are regional factors, health care system factors, the type of organizations such as hospitals, completeness health program , availability facilities and medical personnel, irregular service, the relationship between doctor/other health personnel with patients, other health facility factors, and factors of consumers who use the health service utilization

Research conducted by Zuhrawardi related to analysis of the implementation of outpatient referral first level participants of PT Askes at three health centers in the city of Aceh in 2007 which is about 30-75% of refferal is a reference outpatient first level were made by patients on request/family itself and not on medical indications. His research suggested a link and the influence of the high ratio of health referral of Social Askes participant of PT Askes. Some of the reasons offered by the patient when asked why they ask for referrals include patients feel disappointed with drugs that are provided in health centers, medical equipment in health centers is not complete, if it went to the hospital to have the opportunity to be examined by a specialist (Zuhrawardi, 2008 ).

## CONCLUSION

1. The ability of health workforce have a significant relationship to the non-specialist referral. The ability of health workforce increases, the non-specialist referrals will decrease.

2. In this study there was no relationship between the availability of health workforce with non-specialist referrals.
3. The availability of health infrastructure and facilities has a significant relationship to the non-specialist referral. If the availability of health infrastructure and facilities increases, the non-specialist referrals will decrease.
4. The availability of drugs have relationship with a non-specialist referral. If the availability of the drugs increase, the non-specialist referrals will decrease.
5. The commitment of health care service have not relationship with non-specialist referral.
6. The ability of health workforce, availability of health workforce, availability of health infrastructure and facilities, availability of drugs, and health care service commitments together influence to non specialist referral.

## REFERENCE

1. Amaniah N, (2009), *Relationship Management and Power Factor Managing UKGS with UKGS Service Coverage and Dental and Oral Health Status of Primary School Students in the district of Aceh Tamiang 2009. Thesis. Terrain: University of North Sumatra.*
2. Beth WM., Ayodo E., Kenneth NW., (2012), *Factors Affecting Provision of Service Quality in the Public Health Sector: A Case of Kenyatta National Hospital . International Journal of Humanities and Social Science, 2 (13) ; 114 -125.*
3. Dwikanthi R and Islami, (2015), *Relationship between Competence (Knowledge, Attitudes and Skills) Midwife of the Referral Decision in Case Preeclampsia in Karawang .Journal of Obstetric, 6; 45-46.*
4. Hastuti RT., (2013), *Organizational Commitment and Leadership Styles in Implementation of Performance Based Budgeting Public Service Agency .Journal of Integrated Health Sciences. 3 ; 175 -179.*
5. Idris F, (2014). *Free Kredensialing First Level Health Facilities, Jakarta: A Practical Guide BPJS.*
6. Kesumawati IN., (2012), *Analysis of the Implementation of the Social Health Insurance Leads RJTP Participants PT Askes (Persero) Branch Sukabumi in Puskesmas Nanggeling and Gedong Panjang In 2012 , Depok: University of Indonesia.*
7. *Minister of Health of the Republic of Indonesia, (2014), Guidelines for the Implementation of the National Health Insurance Program , Jakarta: Ministry of Health of the Republic of Indonesia Number 28 of 2014.*
8. Mosadeghard AM., (2014), *Factors Influencing healthcare service quality. International Journal of Health Policy Management, 3 (2); 77-89.*
9. Naiborhu, M., (2011), *National Health Insurance , Medan: Universitas Darma Agung.*
10. Ningrum, RM., And Huda, N., (2014), *Relationship Quality Health Care Patient Satisfaction BPJS the Polyclinic of ENT Runtikal Dr Ramelan Surabaya , Surabaya: STIKES Hang Tuah.*
11. Pattianakotta LA., (2012) , *Factors Factors relating to the Reference Case of Emergency Obstetric Neonatal by the village midwife to the health center in*

- Central Maluku district PONE D 2012 .  
Thesis. Depok: University of Indonesia.
12. Suhartati D., (2015), *Analysis of Implementation of Referral System First Level Outpatient at Participant BPJS in health centers and health centers Iir 5 Merdeka . Graduate Thesis in Public Health, Palembang: Sricwijaya University.*
  13. Thabrany H, *National Health Insurance . Jakarta: King Grafindo, 2014.*
  14. Zuhrazwardi, (2007), *Analysis of Implementation Leads First Level Outpatient Participants Mandatory PT Askes in MIBO health centers, health centers and health centers Batoh Baiturrahman in Banda Aceh in 2007 , Medan: University of North Sumatra.*
  15. Zuliana I (2009), *Factor Individual Characteristics, Health Care Factors and Factors Swallowing Drugs Supervisory Role of the Compliance rate of pulmonary TB patients in treatment at the health center of Medan Labuhan week . Thesis Program Graduate Health Sciences Health Administration Diponegoro University in 2009.*