



Badan Penyelenggara Jaminan Sosial Participants' Ability and Willingness to Pay Additional Cost in Community Health Centers in Kupang District, Indonesia

Frans Salesman¹, Irmina Linda Dewiaty², Sakti Oktaria Batubara¹

Abstract

Introduction: "Healthy" state is one's right to live creatively and productively. When sick, patients pay fixed and additional costs. Fixed costs are borne by Badan Penyelenggara Jaminan Sosial (BPJS/Indonesian Social Security Management System). Additional costs, however, becomes the patient's expense.

Purpose: Analyzing the ability and willingness to pay (WTP) additional costs during health services at Community Health Centers in Kupang District.

Method: This was a survey research with cross-sectional approach. Independent variables: (1) Ability and (2) WTP. Dependent variable: Surcharges for health services. Sampling: A purposive sampling with 218 respondents. Variables measurement used a Likert scale.

Result: Patients incur fixed costs as claimed costs to BPJS, additional costs (additional expenses, costs of meals for family members, transportation, and other expenses). The higher the respondent's income, the higher the ability to pay additional costs ($\alpha = 0.009$; $t = 2.631$). WTP additional expenses is influenced by stage of illness suffered by the patient. The higher the stage, the higher the WTP additional costs ($\alpha = 0.000$; $t = 14.906$).

Conclusion: High accumulation of additional costs becomes a burden for BPJS participants during health services at Community Health Center in Kupang district.

Keywords: Ability, willingness, add cost, health.

Introduction

A "healthy" state is a person's right to live creatively, socially, and economically productive, being able to adapt to their immediate society and environment. The World Health Organization in 1948 declared that "healthy condition" is a state free from all kinds of diseases, whether physical, psychic, emotional, intellectual, or social [1]. Human beings must be healthy—this is the goal of health development in Indonesia. On the other hand, a healthy condition is a right that every citizen of Indonesia has. Therefore, one of the duties and responsibilities of the Indonesian government is to realize that all citizens are entitled to an optimal degree of health to work and live worthy of human dignity.

Workers with poor health status will experience a decrease in work productivity, incurring medical expenses, declining quality of life, not earning, or not working effectively. A sickly head of a household leads to a decrease in family income, low food supply, and housing for the family. On a national level aggregate, poor public health status degrades national productivity, decreases in per capita income, decreases in investment and accumulates the slowdown of the country's economic growth. Throughout human life, people never know when they will get sick, which parts of the body will be sick, what kind of illness will be suffered, to whom and where they will seek treatment, and how much money will be spent to treat the

social security system in anticipation of the possibility of everyone experiencing sickness when they are not ready to face it. The goal as a means of providing basic protection for everyone to overcome certain economic/social risks or events, such as: (1) The need for medical services and (2) delays, loss or decline in some income due to illness, pregnancy, occupational injuries and occupational diseases, old age, disability [2]. The prerequisite of being a member of the private company's insurance agency or the social security system in the field of health organized by the Indonesian Government is to pay the entrance and monthly/yearly fees as required. Each head of household sets aside their income to pay the amount of health insurance contributions as per the desired standard of care, which is included in the contract, agreed with the manager. Contribution payments are adjusted to the buyer's ability to pay and willingness to pay (WTP). In reality, not everyone has the ability and WTP health insurance contributions. For the poor, paying an

insurance contribution becomes an economic burden on the family, because the income may

illness. Because everything is all probability, it is expected that everyone anticipates it through savings, becoming a member of the insurance managed by the company or by the government through the social security system. The Government of Indonesia provides a

¹Department of Nursing, Citra Husada Mandiri Kupang, Institute of Health Sciences, Kupang, Indonesia

²Department of Economics & Business Universitas etc, Universitas Nusa Cendana, Kupang, Indonesia.

Address of Correspondence:

Dr. Frans Salesman,
Manafe Street 17 Kayu Putih Oebobo Kupang (85111).
Email: franssalesman@gmail.com

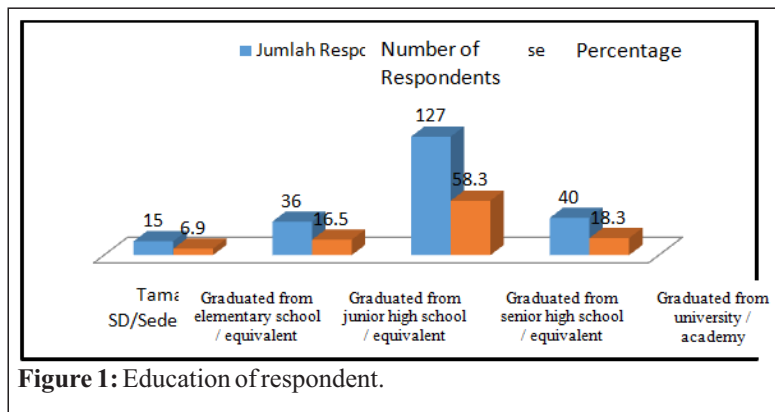


Figure 1: Education of respondent.

not be fixed every month or every year. The priority of expenditures to meet essential needs in the family such as purchasing rice, side dishes, education, and other social expenses outweigh stowing away earnings to pay health insurance contributions. For the poor, sickness is destiny, and they expect God's help to heal it. This situation is counter productive with the Indonesian government policy, which requires all Indonesian citizens to be healthy and prosperous until 2019. The achievement of all citizens to receive national health insurance by 2019 requires a special policy for those who have not become participants due to inadequacy. Healthy Indonesia Card (Kartu Indonesia Sehat=KIS), launched on November 3, 2014, is a form of healthy Indonesia program. This program ensures the inadequacy community benefits from health services as implemented through the National Health Insurance organized by Badan Penyelenggara Jaminan Sosial (BPJS); the expansion of beneficiary of beneficiaries or in Indonesian is called Penerima Bantuan Iuran (PBI) coverage includes social welfare problems Penyandang Masalah Kesejahteraan Sosial and newborns into beneficiary contributions; it also provides additional benefits such as preventive, promotional, and early detection services implemented more intensively and integrated [3]. Up to the end of September 2017, Jaminan Kesehatan Nasional-KIS participants have reached 180.77 million people or 89.93% of the target of 201 million Indonesians who should be participants of BPJS [4]. Kupang district is one of 22 districts in East Nusa Tenggara province with a poor population of 64,940 people [5] through the Regional Budget of 2016. Providing a budget of IDR. 200,000,000 to register its poor, as many as 2,000 people participating in BPJS in 2017 increased the registration of the poor as

many as 10,800 people with the amount of funds as much as IDR. 3,000,000,000 - Until 2017, poor people in Kupang district who are members PBI are around 12,800 people or 19.71% of the total poor population. The remaining 80.29% of the poor are not yet participating in BPJS. The poor who participated had received health services at various Community Health Center in Kupang district according to the type of demand for health services they needed. However, poor people who should be free of all maintenance costs still have to incur additional costs beyond the costs borne by the BPJS. As for the costs, they include transportation costs, Class I inpatient fees, national non-formulary drug costs, waiting fees, and other costs with regard to patient care. This study will analyze BPJS participants' ability and WTP for additional costs (additional costs of patient care, transportation costs, and maintenance costs with respect to patient care) when receiving health services at Community Health Centers in Kupang district.

Method

The type of research used is survey research, to explain the influence of BPJS participants families' ability and WTP additional cost of health services. The approach of this research is cross-sectional, where the dependent and independent variables are studied simultaneously (Notoatmodjo, 2005) [6]. The dependent variable in this study is the additional cost while receiving health services at the Community Health Center. The independent variable of this study is the ability to pay and the WTP. The area of Community Health Centers in Kupang district is grouped into four clusters as sample of research location is used area random sampling technique, that is take one from Community Health Center in every

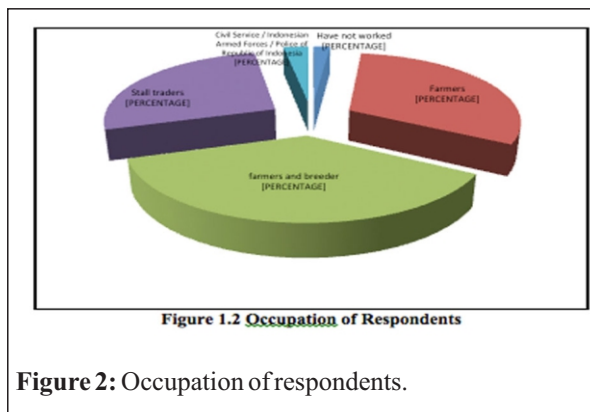


Figure 1.2 Occupation of Respondents

Figure 2: Occupation of respondents.

cluster. There were four Community Health Center. The population of the study was the patients of BPJS at four selected Community Health Centers as samples of the study sites. The purposive sampling technique obtained 218 respondents. Data and information of respondents were collected using accidental sampling, interviewing respondents awaiting health services at Community Health Centers. Measurement of independent and dependent variables is using the Likert scale. The variable of ability to pay is measured from the income of respondents using very high, high, medium, and low and very low category. The WTP variable with the willingness category is very high, high, medium, and low and very low. The additional cost variables (additional medical costs, meal costs of patient's family members while waiting for patient care, transportation costs, and other costs regarding patient care) are measured from the nominal amount paid ranging from very high, high, medium, low and very high, and very low. Analysis of research data using Linear Regression to analyses the effect of ability and WTP for additional health service in Community Health Center. Characteristics of respondents include education level and occupation of respondents.

Result

Characteristics of respondents

The characteristics of respondents were analyzed, as well as the education of respondent, occupation of respondent, and respondent's income. Education forms the perfection of thought that can expose quality information that researchers need, and acts as a means improving one's knowledge. Information is the knowledge of the results of processing related data into a conclusion. Information can also be said as a

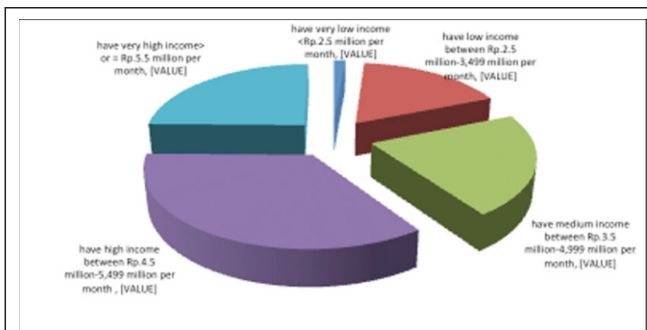


Figure 3: The monthly income of the respondents of the research area over the past 3months.

summary of data. Technically, the data are a collection of facts and phenomena that are processed into information and can be used to draw conclusions [7]. With relation to the WTP, research indicates that the last education taken has a positive and significant impact on the WTP to improve service quality health BPJS Health Class III, assuming that other factors are considered constant (*ceteris paribus*), if the last education to go up will increase WTP [8]. The last education taken indicates one's level of education. The higher a person's education, the higher their knowledge, awareness, and understanding of health. They tend to pay more attention to more observant health issues. In this study, the level of education of respondents in the study area is shown in Fig. 1. In Fig. 1, it was reported that 15 respondents (6.90%) graduated from elementary school/equivalent, 36 respondents (16.50%) graduated from junior high school/equivalent, 127 respondents completed their education at senior high school, and 46 respondents graduated from university/academy. Furthermore, the type of occupation of respondents can be seen in Fig. 2 below. The data in Fig. 2 show that as many as 4 respondents (1.80%) have not worked, while as much as 68 respondents

(31.20%) work as farmers; farmers and breeder comprise of 81 respondents (37.20%), stall traders 59 respondents (27.10%), and Civil Service/Indonesian Armed Forces/Police of Republic of Indonesia-6 respondents (2.80%). The study explores the amount of respondents'

income to know about the ability and WTP health service rates. The result of other research shows that the income level has a positive and significant effect to the WTP of BPJS Kesehatan Class III participants for the improvement of health service. When a person's income is higher, the expected level of good service will increase as well to encourage their WTP extrafor the improvement of health services[8]. A picture of the monthly income of the respondents of the research area over the past 3 months is shown in Fig. 3. The data in Fig.3 show that 7 respondents (3.20%) have very low income <Rp.2.5 million per month, 3 respondents (1.40%) have income between Rp.2.5 million and 3,499 million per month, 38 respondents (17.90%) have income between Rp.3.5 million and 4,999 million per month, 47 respondents (21.60%) have income between Rp.4.5 million and 5,499 million per month, and 54 respondents (24.80%) have income ≥Rp.5.5 million per month.

Interpretation of statistical analysis (Table 1)

The result of the analysis shows that there is a positive influence of the respondent's income on the WTP the extra costs outside

the fixed costs during the health service of the Community Health Center ($\alpha = 0.009$; $t = 2,631$). It means the increased income of BPJS participating families is also increasing the WTP additional costs outside health services costs. It was also revealed that there is a positive influence of WTP BPJS participants against the WTP additional fees for getting services at the Community Health Center ($\alpha = 0.000$; $t = 14.906$). Therefore, BPJS participants' increased WTP also increased the WTP additional costs outside health services costs.

Discussion

Health services are skill services provided by health personnel to meet complaints of the perceived illness of the patient. During health services, service providers as producers interact directly with patients as consumers. Production and consumption occur simultaneously. A number of health services received by the patient in the form of examination, diagnosis, treatment, therapy, and advice were felt directly by the patient. One of the typical characteristics of health services compared to other services is the diversity of services among individuals depending on the type of illness. During treatment, a patient may get a different treatment with other patients. To support the effectiveness of health services, a provider uses medical devices, medicines that are calculated as the costs paid by patients. Avoiding the variation of the cost burden for the patient on one health service unit, the management of the health service establishes the payment system with two systems, namely, capitation systems and Diagnosis-Related Group (DRG) systems. The capitation system is a method of payment for health-care services in which the Health Service Provider receives a fixed

| Table 1: Regression result of influence of income and WTP against WTP additional health service costs at Community Health Center Kupang district | | | | | |
|--|-----------------------------|----------------|---------------------------|--------|-------------|
| Model | Unstandardized coefficients | | Standardized coefficients | | |
| | B | Standard error | Beta | t | Significant |
| 1 | | | | | |
| (Constant) | 1.346 | 0.184 | | 7.318 | 0 |
| The monthly income of the respondents over past 3 months | 0.094 | 0.036 | 0.125 | 2.631 | 0.009 |
| WTP additional costs | 0.553 | 0.037 | 0.707 | 14.906 | 0 |

Source: Research result. WTP: Willingness to pay

income per participant for the services specified per period of time, and the DRG payment method is one of the prosecutorial methods of payment of health-care cost based on unit cost per diagnosis according to International Classification Disease (ICD) Ninth Edition Clinical Modification and ICD-10. In this system approach, what needs to be avoided is the incidence of catastrophic cases that are expensive, difficult to reach by the patients' ability to pay from their own pockets. However, this system is very good for the manager because it facilitates the calculation of health service providers [9, 10]. The fixed cost burden borne by the participant of the BPJS participant during health service is paying the costs set by the health-care provider. For participants of the Social Security Management Agency (BPJS), the cost of the fixed costs is borne by the manager of BPJS. The results showed that the higher the income of participants' BPJS, the higher the WTP these additional costs. Some researchers analyzed the ability and WTP health service costs; among others, Kurniawan and Intiasari confirmed that income levels have the positive and significant influence to BPJS participants' (WTP for in patient service costs in Class III at Community Health Center in Banyumas as district. It was found that the higher the income of a person, the

more the expectation level of getting good service will increase to encourage the WTP additional fees for improved health services [11]. Mudayana research, Rusmitasariat Bantul Community Health Center found that family income affects the willingness of patients to pay for treatment already set. Patient families with a majority of <1 million in earnings have a strong WTP for services already established [12]. During a patient's health care, the BPJS participant not only pays the health service cost but also pays for the follow-up variable costs such as the patient's and patient's family's transportation costs during the treatment, the cost of medicines outside the list of national formulary medications and other costs that are difficult to avoid for the family of BPJS patients. WTP additional costs beyond the fixed costs for health care is determined by the patient's family income level. The ability to pay and the WTP for the additional costs of health services are also encouraged by the stage of illness suffered by the patient. When the diagnosis states that the stage of the disease at a level that endangers the patient's survival, the patient's family will no longer rationally incur additional elastic variable costs based on the patient's condition. They do not take into account the additional cost burden, as long as the patient is cured of the illness. The results of this study indicate that the

higher WTP BPJS participants, the higher the WTP the additional cost of health services.

Conclusion

The orientation of asking for health care is healing. To recover, a fixed amount of tariff and variable costs are incurred for additional expenses (medical treatment additional expenses, meal allowance for the patient's family members while waiting for patient care, transportation costs, and other costs with respect to patient care) for health services at Community Health Center, taken from family income. The higher the income levels of the respondents, the higher their ability to pay additional fees for health services in Community Health Center. WTP additional costs for health services at the Community Health Center is also influenced by the stage of the illness suffered by the patient. The higher the stage of disease experienced by the patient, the higher the WTP additional costs for health services at the Community Health Center. The additional costs incurred by the patients become a burden for BPJS participants during the health service at Community Health Center in Kupang District.

References

- Ninaio, 2011. Definition of Healthy and Sick According to the World Health Organization. Available in <http://https://www.scribd.com/.../Definisi-SEHAT-Dan-Sakit>
- Ana Syaketi, WN, Suadrawati Y. 2010. Analysis of the Social Security Administering System; Transformation of State-Owned Enterprises of Social Security Organizer. *Journal of Economics & Public Policy*. Vol. 1 No. 1, Juni 2010 1 – 24. Available in <http://https://journal.dpr.go.id/index.php/ekp/article/view/72/39>
- National Team for Accelerating Poverty Reduction, 2015. Healthy Indonesia Card. Productive Family Building Program. Accessed at <http://www.tnp2k.go.id/id/program/program.../kartu-indonesia-sehat/>
- Agency for the Provision of Social Security-Health, 2017. Complete the distribution of Healthy Indonesia Cards 100%, 2016, The Social-Health Insurance Administering Agency has a Green Report. Available in <http://https://bpjs-kesehatan.go.id/bpjs/index.php/jumlahPeserta>
- Agency for the Provision of Social Security-Health Kupang District, 2017. Kupang District In The Figure, 2017. Available in <http://https://kupangkab.bps.go.id>
- Notoatmodjo S, 2005. Health Research Methods. Available in <http://www.library.um.ac.id/free.../koleksi-digital-perpustakaan-23012.html>
- Putro CE, 2014. Influence Quality Information System and Quality Information Against User Satisfaction Software Accounting at Trading Company In Sidoarjo City. Pp.2-3.
- Kurniawan A, Intiasari DA, 2011. Analysis of Factors Affecting the Willingness to Pay Outpatient Services Puskesmas In Banyumas District. *Journal. Kesmasindo*. Volume 4(2), Juli 2011, hlm. 105-118. Available in <http://jos.unsoed.ac.id/index.php/kesmasindo/article/download/19/21/>
- Mohamad Idris, 2010. Health Financing. Public Health Discussion. Available in <https://muhammadidris1970.wordpress.com/2010/04/17/pembiayaan-kesehatan/>
- Ministry of Health of the Republic of Indonesia, 2008. List of Disease Classification and Action and Tariff of Health Service for Poor People at Hospital 2008. Jakarta. Directorate General of Social

Services Development. Available in <http://www.nythrieh.blogspot.com/2008/09/diagnostic-related-group.html>

11. YandrizalY, Rifai, Utam PS, 2016. Analysis Of Ability And Willingness To Pay The Achievement Of UHC-JKN Bengkulu. Journal of Public Health Andalas University |Oktober 2015 - Maret 2016 | Vol. 10, No. 1, Hal. 3-10. [Jurnal.fkm.unand.ac.id/index.php/](http://jurnal.fkm.unand.ac.id/index.php/)

jkm.a/article/download/156/153

12. Mudayana, A.A. (2012). Employee Work Relation With Employee Performance in Hospital Nur Hidayah Bantul 2012.. Journal Health Community, Vo.6 Number 1 January 2012. Pp.1-74

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