

ORIGINAL ARTICLE

THE INTRODUCTION OF SUBSIDISED HEALTH INSURANCE FOR THE POOR IN THE CITY OF PADANG, INDONESIA: DOES THE GAP ON HEALTH PAYMENT AND HEALTH SERVICE UTILISATION STILL EXIST?

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ABSTRACT

Indonesian government secures the access of the poor towards health services through subsidised schemes. This study is aimed to describe the pattern of health expenditure by households and to describe the pattern of health service utilisation across household's socioeconomic level in the city of Padang after seven years of the introduction of subsidised schemes. A household survey was conducted involving 918 households, with multistage random sampling method. The proportion of out-of-pocket (OOP) health spending as a share of household's capacity to pay was regressive across consumption quintiles. The proportion of households with catastrophic health expenditure was 1.6% while 1.1% faced impoverished health expenses. Among those who need health care, the utilisation among the rich was higher than the poor. Health insurance schemes in Padang provides financial protection, however with regards to household's capacity to pay, the poor has the higher burden of health payment. The gap on health service utilisation between the poor and the better-offs was still apparent for outpatient services and it has been narrowed for inpatient care. This study suggests that the subsidised schemes for the poor are highly needed and the possibility of the leakage of subsidies to the rich should be considered by the government.

Keywords: health expenditure, outpatient visit, inpatient service utilisation, jaminan kesehatan nasional, Indonesia

INTRODUCTION

South East Asian economic crisis in 1997 left the increasing of poverty and unemployment in Indonesia. The inflation and the declining of household purchasing capacity due to financial hardship affected the utilisation of health services. Moreover, the access of low-income households towards health care was not secured. It was only less than 20% of the population covered by health insurance which was dominated by compulsory health insurance for civil servant and pensioners (*Askes*), low coverage of social health insurance for formal employees (*Jamsostek*), and low participation of private health insurance¹.

Following the economic crisis, Indonesian government launched social safety net programme. This programme included subsidised rice for the poor families; scholarship for elementary and junior high school students from poor families; block grants for school and public health centres for their operational; nutrition supplements for infants and children; labour creation activities; and village development schemes². Through this social safety net programme, the government subsidised the price of health services at public health facilities for poor households who owned the health cards³.

The social assistance programmes for the poor that were established as a response to economic crisis, then were developed as a permanent national development strategy². The government

together with the parliament released the National Social Security System Act in 2004. This act mandates that state is compulsory to develop a national social security system for the people of Indonesia in order to assure that the primary needs of living for every insured individual under the scheme and their family members are met. The implementation of this act started with some provinces as pilot project for the implementation of health assurance for the poor called *JPK GAKIN*. In 2005, the Ministry of Health implemented *JPK GAKIN* as a nationwide programme called *Askeskin*. By 2008, *Askeskin* programme was improved to become *Jamkesmas*. *Jamkesmas* is a subsidised health insurance scheme by which the premium of eligible beneficiaries is financed through central government budget. The eligible beneficiaries were determined and approved by central government⁴. *Jamkesmas* programme is aimed to control health financing, to increase the quality of health services for the poor, and to enhance programme transparency and accountability. The government directly transferred the fund to health providers based on the DRG system for inpatient service and capitation for outpatient service.

In the same period, the governmental system was changed dramatically from centralization to decentralization. Then the Regional Government Act which was issued in 2004, urged that regional government, whether provincial or district level, to develop their own social security system. As the consequence of this act, in 2007, the

Governor of West Sumatera Province enacted governor regulation about the implementation of provincial health assurance called *Jamkesda* to cover the remaining poor households in the province that were not included within *Jamkesmas* scheme. *Jamkesda* was mainly managed by district government even though the subsidy budget was shared between provincial and district government.

Several studies were conducted to investigate the impact of subsidised health insurance schemes on health expenditure and health service utilisation in Indonesia. Sparrow found that the distribution of *Askeskin* card was pro-poor but the effect was not apparent at the level of health service utilisation³. A separate study found that *Askeskin* has successfully reduced out-of-pocket (OOP) health spending⁵. Several other studies identify a leakage of government subsidies to the rich^{6,7}. However, the existed studies in Indonesia investigated the impact of only certain type of health insurance scheme. In addition, none of these studies were conducted comprehensively at district level where the barriers on the implementation of *Jamkesda* existed.

The subsidised schemes, *Jamkesmas* and *Jamkesda* were aimed to enhance the equity on health expenditure and health service utilisation by the people across socioeconomic level. It is important to investigate whether the gap on health expenditure and health service utilisation between the rich and the poor still exists after seven years of the introduction of subsidised health insurance for the poor. It becomes more crucial as Indonesian government set a target to achieve universal health coverage by merging all established health insurance schemes including subsidised schemes into national health insurance (JKN). The subsidised beneficiaries of *Jamkesmas* and *Jamkesda* are automatically become subsidised beneficiaries under JKN. JKN was effectively implemented in January 2014. Empirical evidence is needed to argue that the current expansion of health insurance coverage through subsidised schemes contributes in enhancing the equity of health expenditure and health service utilisation.

This study is aimed to describe the pattern of health expenditure by households; to determine the proportion of households with catastrophic health expenditure and its occurrence across household's socioeconomic level; and to describe the pattern of health service utilisation across household's socioeconomic level in the city of Padang, West Sumatera Province, Indonesia. A study in the city of Padang is important since Padang is the capital of West Sumatera Province. The financial capacity of the local government is quite limited compared with other cities in Indonesia. However, the number of population subsidised by the local government under

Jamkesda is the biggest one among districts in West Sumatera Province. Through this study, areas that need improvements in order to achieve universal health coverage through subsidy for the poor can be identified earlier. The result provides an important input for evidence-based policy making in order to secure health service utilisation by the poor and protect them from financial catastrophe.

METHODOLOGY

This is a cross-sectional study through household survey that was conducted between April and August 2012 in the city of Padang, West Sumatra Province. A total of 918 (95.5%) of 961 visited households participated in this study. The administrative structure of Padang is comprised of sub-districts or *kecamatan*, followed by *kelurahan*, which are in turn divided into several *rukun warga* (RW) and at the smallest scale, there are city blocks called *rukun tetangga* (RT). The total of 918 samples was divided into 9 of 11 *kecamatan* in the city, and the samples were selected through a multistage random method. One *kelurahan* from each *kecamatan* was selected at the first stage, followed by one selected RW from each *kelurahan* by using simple random sampling. Then, from one to three RT were selected randomly in each RW according to the required number of household samples for each *kecamatan*, and simple random sampling was employed. All households in the selected RT were included as study samples.

The respondents were household members conversant with the characteristics of the household. Informed consent was obtained from all respondents. Trained interviewers consisted of public health officers at the local public health centres. Data was collected through face-to-face interviews using a pre-tested and validated questionnaire. The following variables were collected: demographic characteristics of the household; health insurance; economic level with households categorized as poor if their monthly income per capita was less than IDR 260,000; household size; household income characterized as the total earned by all household members in the previous three months; outpatient service utilization defined as the number of outpatient visits per household within the last 3 months and inpatient services used by the household within past year. In this study, catastrophic health expenditure is defined as a household's OOP health payments that equal or exceed 40% of the household's capacity to pay, while impoverishing health spending is defined as household expenditures equal to or higher than subsistence spending but lower than subsistence spending net of OOP health payments^{8,9}. A descriptive statistical analysis was performed to describe the pattern of health expenditures and health service utilization. Data analysis was carried out using the SPSS statistical

software package v20.0, 95% of confidence interval was used.

RESULT

Characteristics of Respondents

A total of 918 respondents participated in the interview. Amongst the respondents, large proportion was females (89.8%) and was spouses to the heads of the households (79.3%). The respondents were on average 42.5 ± 12 years old, with ages ranging from 17 to 82 years old. In terms of household characteristics, a majority of the heads of households attained senior high school (44.6%), and followed by 21.7% who only attained primary school as their highest level of formal education. Most household heads worked as labourers (22%). The average monthly income per household was IDR $772,609 \pm 613,561$,

whereby about 6.4% of these households were categorized as poor. More than half of household samples (50.5%) were insured and 49.5% were not protected by any health insurance scheme.

OOP Health Expenditures

The overall average of the households' annual OOP health spending was IDR (Indonesian Rupiah) 215,052.83 (95% CI 130,000 - 300,000) (Table 1). Insured households spent approximately one-third of what the uninsured households spent on health expenditure. Additionally, the average annual OOP health expenditure showed a progressive trend across households' wealth quintiles, starting from IDR135,250 in Q1 and steadily increased to IDR343,421 in the fourth quintile. This trend, however, took a downturn (IDR217, 277) for households in the highest quintile.

Table 1 Household's expenditures on health

Category	Result
Annual OOP health spending (IDR)	
Mean \pm sd	215,053 \pm 1,314,607
95% CI of mean	130,000 - 300,000
Annual average of OOP health spending (IDR)	
Insured (95% CI)	115,183 \pm 503,089 (69,237 - 161,128)
Uninsured (95% CI)	316,679 \pm 1,792,362 (151,549 - 481,810)
Average annual OOP health spending across wealth quintiles (IDR)	
Quintile 1 (poorest)	135,000 \pm 776,685
Quintile 2	179,000 \pm 684,121
Quintile 3	201,000 \pm 658,097
Quintile 4	343,000 \pm 2,064,275
Quintile 5 (richest)	217,000 \pm 1,701,679
Annual OOP as a share of household capacity to pay across wealth quintiles (%)	
Quintile 1 (poorest)	3.7 \pm 18.7
Quintile 2	2.5 \pm 9.3
Quintile 3	2.1 \pm 7.0
Quintile 4	1.8 \pm 10.0
Quintile 5 (richest)	0.6 \pm 3.5
Annual average of OOP health spending by insurance type (IDR)	
Askes	87,765 \pm 369,851
Reimbursement by company	43,750 \pm 123,744
Jamsostek	73,103 \pm 222,575
Private health insurance	255,333 \pm 609,894
Jamkesmas	114,411 \pm 575,326
Jamkesda	198,345 \pm 677,792
Household with catastrophic health expenses (%)	1.6
Household with impoverished health expenses (%)	1.1

In contrast, the proportion of OOP health spending in relation to a household's capacity to pay showed a downward trend. Households in Q1 spent the highest proportion of OOP health payment in relation to their financial capacity (3.67%), whereas those in the highest quintile spent the least proportion (0.57%). On the other hand, in relation to the type of insurance, those insured by private health insurance spent the highest OOP health payment (IDR255,333), and followed by *Jamkesda* beneficiaries

(IDR198,345). The burden of OOP health spending compared to the household's capacity to pay among *Jamkesda* beneficiaries was the highest (2.1%). In contrast, the percentage of OOP spending as share of capacity to pay among private health insurance purchasers and *Jamkesmas* beneficiaries were 1.6% and 1.5% respectively. In terms of financial protection, the proportions of households with catastrophic and impoverished health expenses were low at 1.6% and 1.1% respectively.

Outpatient Service Utilisation

In terms of the utilization of outpatient service, 242 of 918 total respondents (26.4%) reported that their household members visited at least one outpatient facility within the last three months. The total number of outpatient visit was 553 visits whereas the average number of visits was 2.3 times among households that utilised outpatient facilities or 0.6 visits per household.

Table 2 informs that more than half of respondents reported that at least one of their household members had any health problem within the last three months. However, among those household whose members experienced any health problem, 46.2% decided to seek health service and 53.8% decided not to seek health service and preferred self-treatment or traditional medicine. This study also found that public facilities were still a preference for the people in the city of Padang to obtain health services for ambulatory care. Private midwife practice was still in favour for the community which was accounted for 23.3% of outpatient visits.

The trend of outpatient service utilisation was described by Figure 1. It is obviously that the absolute number of outpatient visits was lesser

among the better-offs (fourth and fifth quintiles) as much as 80 and 101 number of visits respectively, which was only accounted for 32.7% of total outpatient visits. On the other hand, in terms of the need of outpatient service, the proportion of households that their members were reported as having health problem in the last three months, was higher among the less wealthy households (the third quintile and below). Contradictory with the need for outpatient service, the proportion of households that utilised outpatient facilities among those who need it was higher among the rich than the poor.

This study revealed that 69 of 918 (7.5%) respondents reported that their household member(s) had been hospitalized within the past one year whereas the total number of hospitalization was 73 times. Furthermore, the average number of hospitalization was 0.1 time per household and 1.1 times per household that utilised inpatient service within the last one year. Majority of households preferred to choose public hospital (58.0%) for hospitalization, followed by private clinic/hospital and midwife as much as 24.6% and 15.9% respectively. The midwife facility was utilised in terms of hospitalization due to motherhood health care.

Table 2 The Utilisation of Outpatient Health Services in the Past Three Months

Indicator	N (%)
Proportion of households with any health problem within the last three months	
Yes	515 (56.1)
No	403 (43.9)
Households with any health problem within the last three months	
Seeking health services	238 (46.2)
Self-treatment and/or traditional medicine	277 (53.8)
The total number of outpatient visits by households	
Public hospital	105 (19.0)
Private hospital	25 (4.5)
Private doctor	41 (7.4)
Public health centre (<i>Puskesmas</i>)	252 (45.6)
Midwife	130 (23.3)
Total	553 (100)

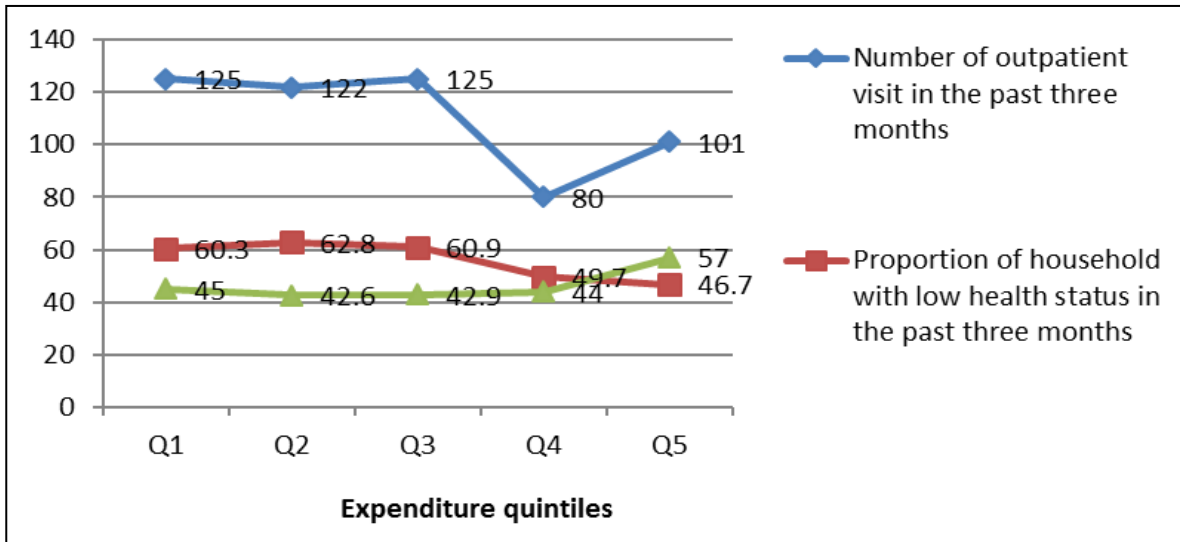


Figure 1 The Pattern of Outpatient Service Utilisation

Inpatient Service Utilisation

Figure 2 graphed the trend line of inpatient service utilisation across different wealth quintiles. Both of the proportion of households that utilised inpatient health service and the proportion of households reported that their family members suffered from chronic illness in the past one year were higher among the poorest or the first two quintiles. Then the trend

decreased until the fourth quintile, showing that the utilization of inpatient service was higher among those who really need it. However, the opposite result was found in the richest whereby the proportion of households that had hospitalization was less than those in the fourth quintile even though the proportion of households with chronic illness was higher among the richest families.

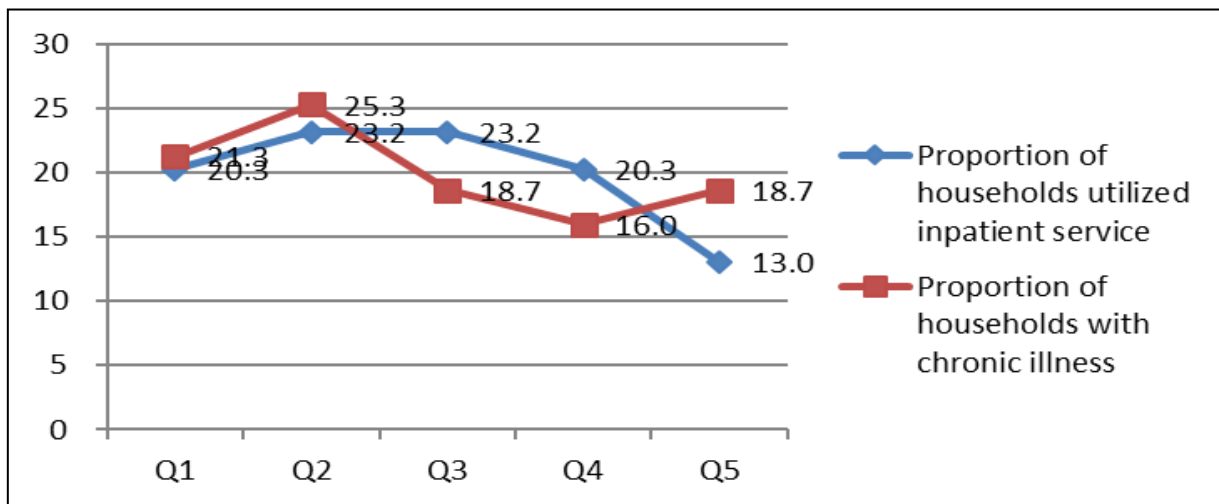


Figure 2 The Pattern of Inpatient Service Utilisation

DISCUSSION

Household’s Expenditures on Health

In general, health insurance schemes in the city of Padang, including the subsidised health insurance financed by local government, are able to reduce the level of OOP health payment due to health service utilisation among insured households. This result reflected that one part of the effort for universal health coverage has been achieved. Moving away from OOP health payment towards pre-payment health financing can reduce the impoverishing impact of OOP health spending¹⁰.

When the analysis of OOP health spending was employed according to household’s consumption quintile, the average amount of OOP health expenses in each quintile showed in a progressive pattern. It means that households within the highest quintile which was the richest paid the greatest amount of OOP payment when they obtained health care services. However, when these amounts of money were compared with households’ capacity to pay, the poorest households should bear the highest financial burden as much as six fold higher than the richest.

This study found that health financing burden is regressive in the City of Padang. The phenomenon can be explained when this study also revealed that almost half of the poor households were still not protected financially by health insurance scheme. Among the insured poor households, most of them were protected by *Jamkesda*, a subsidised health insurance with lower premium level compared with the schemes which covered the better-offs.

This study also found that *Jamkesda* scheme provided the lowest level of financial protection towards the beneficiaries. Higher population coverage, in this case is the extended coverage to the poor, might not always lead to low OOP health expenditure among the poor, or improved health outcome, because the existed prepaid package was inadequate to cover medical services, such as *Jamkesda* scheme¹⁰. Other factors contributed to the high OOP health expenses including low participation of health insurance scheme, the absence of coverage key service, inappropriate or illegal billing by health providers and little understanding of the benefits by beneficiaries¹¹.

WHO proposed that health expenditure in a country could lead to impoverishment, if the health spending as a share of total health expenditure in the country is more than 15 to 20%¹². The high OOP health spending as a share of total health expenditure can be found even in countries at intermediate stage of health reform such as the Philippines and Vietnam which were more than 50% , whereas in Indonesia the share was 38%¹¹. Thus, the provision of the government of Indonesia to reduce the dependency on OOP health payment through national health insurance and providing subsidies for the poor is crucial.

Health Service Utilisation

The population with higher need of health care or in other words having low health status is mostly distributed among households with low economic level. This study found that the low-income households have higher absolute number of outpatient visits than the rich. However, this study found that most of poor households that need health services do not visit outpatient facilities. They preferred for self-medication or traditional medicine. It appears that the equality of outpatient health service utilisation has not been achieved yet at district level in Indonesia, even though the coverage of subsidised health insurance has been expanded. As typically found in low and middle income countries, the poor has the higher unmet need of health care utilization¹³.

The inequality of health service utilisation found in the present study especially for outpatient care was in line with some other studies. A study analyzed the data of 1997/8 Indonesian Family

Life Survey concluded that 15.42% of outpatient care occurred in public facilities and the utilization by the richest was slightly lower than the poorest, the utilization rate of the poorest was lower than the second, third and fourth quintiles¹³. Other studies found the effect of economic crisis on the sharp reduction of outpatient care utilization. The proportion of people who visited outpatient providers declined from 12.8% in 1997 into 10.5% in 1998, or from 0.2 visits per person per month in 1997 into 0.1 visits per person per month in 1998^{3,14}. The use of dental care was also found to be concentrated among the wealthier in spite of the need of dental care was shifted from the rich¹⁵.

The matter of inequity in health care use was among the principal issues in other developing countries. The wealthier were more likely to use health services and as a matter of fact, amongst those who really need health care, the utilization by the rich was remained higher than the poor^{9,16,17}. On the other hand, it was found that in countries without universal health coverage policy such as Switzerland and U.S, inpatient care was in favour of the poor after adjusting for the need whereas pro-rich inequality of health service utilisation was found in countries with universal health coverage policy such as Ireland and Portugal¹⁸.

This fact suggests that factors related to barriers on health care utilization other than health insurance protection must be addressed. The effect of non-need factors, namely education level and employment, vary towards health service utilisation. In South Korea, non-need factors shifted the utilization to pro-poor whereby low-educated or unemployed population use more outpatient and hospital service¹⁹. However, another study stated that there was no effect of income in most studies on health service utilization in developing countries¹⁷.

CONCLUSION AND POLICY IMPLICATION

The amount of OOP health payment among insured households is lower than uninsured households. It was found that the proportion of catastrophic and impoverished health spending is low in the city of Padang. Even though the pattern of absolute number of annual OOP health spending is progressive, the OOP health payment as a share of household capacity to pay showed in a regressive pattern, suggesting that the poor would bear higher financial burden when they obtain health services. In terms of health service utilisation, the gap between the poor and the rich was apparent for outpatient services although it has been narrowed for inpatient care.

Indonesia lessens the reliance on OOP health payment and has undertaken one more step towards universal health coverage after of the launching of its national health insurance. This

policy is also aimed to lessen the gap on health service use. In order to pursue this goal, mandatory enrolment of the uninsured has to be expanded. Meanwhile, the subsidised schemes for the poor are highly needed and should be continuously provided by the government through general taxation. This study justifies the government's policy to integrate *Jamkesda* into JKN and increase the premium as much as JKN premium, hence the benefit coverage is broadened and the OOP payment will be reduced. Despite the expansion of subsidised schemes, the regressive health household expenditure still exists, thus the leakage of subsidies to the rich should be considered by the government. Hence, with regards to the implementation of a national health insurance in developing countries with decentralization governmental system, control from central government should not be absent particularly the control on program implementation at district level. The government also need to consider the factors other than financial protection to enhance the equity on health service utilisation, namely people with low education level and unemployed.

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