Narrowing the Gap of Inequity in the Indonesia's National Social Health Insurance Scheme, 2014-2018

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Research

Keywords: equity, national health insurance system, Jaminan Kesehatan Nasional, health services access

DOI: https://doi.org/10.21203/rs.3.rs-620310/v1

Abstract

Background. Indonesia is nearing its 7-year implementation of its national health insurance scheme, or the *Jaminan Kesehatan Nasional* (JKN), as a facilitator for achieving universal health coverage (UHC). Despite its long-running system, it is contentious as to whether JKN has been narrowing the gap of inequity in its delivery. This paper aims to explore on whether the national health insurance scheme in Indonesia have been promoting equity of access towards health services.

Methods. This study analyzes findings from JKN statistic data of 2014-2018 published by Government of Indonesia. Using a retrospective design, this study identified membership and utilization of health services within JKN, based on different membership enrollment groups as proxy for income.

Results. JKN has been expanding its enrollment significantly within 5 years, during year 2014 to 2018. Moreover, the study concludes that there was increased access for outpatient in all membership groups. Inpatient care was increased in low-income group, but not in high-income group. Result also showed inpatient access was correlated with adequate supply side intervention, particularly hospital beds.

Conclusion. JKN has been successful in narrowing the inequity gap, particularly by serving the low-income group better in terms of access. Going forward, equity needs to be incorporated into JKN achievement indicator, particularly to accelerate Indonesia's effort to realize universal health coverage.

Introduction

Achieving Universal Health Coverage (UHC) has been a priority for health sector development in Indonesia and is a constitutional mandate as the right to health care for everyone (1). In the frame of ensuring access to health care while protecting people from impoverishment, in 2004 Indonesia passed Law No. 40/2004 on National Social Security System as part of the National Social Security System, to introduce a National Social Health Insurance (SHI) Scheme known as *Jaminan Kesehatan Nasional* (JKN). The law is similar to the US Social Security Act that established Medicare for seniors and Medicaid for low-income (2). The difference is that JKN is for all Indonesians. JKN combines a social health insurance (SHI) mechanism (payroll taxes) with significant government subsidy for the lowest income households. Due to political resistance, the implementation of the JKN was delayed until January 2014. The JKN integrates into a single scheme all existing social health insurance (SHI) and social assistance programs (equivalent to Medicaid in the US), which in 2014 covered 133 million people (3).

Members of JKN fall into one of three groups – formal sector, informal sector, and those who are poorest, making up a total of 50%. Each group has different premium contributions and class of hospital accommodation (1st, 2nd, 3rd class). For formal sector wage-earners, there is a compulsory 5% payroll tax levied monthly, which was 4% paid by the employer and 1% paid by the employee. The informal sector workers i.e., those who are non-waged, voluntarily choose to become members of JKN. They are then provided with three different contribution rates as a proxy of different income levels. The different contribution rates correspond to three classes of hospital room accommodations. The medical benefits

are comprehensive, defined as medically necessary, and the same for everyone, regardless of their income. The monthly contributions for the 50% of poorest Indonesian households, generated from a special population survey, are fully subsidized by the government.(3, 4) Following this financing design, it is expected that by 2024, 98% of Indonesia's entire population of 275 million people will be covered.

The Indonesian legislation on health insurance i.e., Law No. 82 Year 2018 on Health Insurance allows subsidy of JKN member for those who are poor; creating a separate pool of membership into the subsidized and non-subsidized member. The government of Indonesia is responsible for covering the premium for subsidized poor-member, which is classified into 3rd membership class, through the national budget. Meanwhile, a formal worker whose premium was paid by employer classified into 1st membership class, while informal worker classified into 2nd membership class who paid premium from own pocket. The coverage of rate using the national budget was aimed to financially protect the poor while accessing health services, which promotes equity into the body of JKN.

This paper addresses the current trends in JKN membership and service utilization in the context of inequity of healthcare access in Indonesia, particularly horizontal inequity, which is heavily attributed to factors other than medical needs. The authors put the focus of the paper on health insurance ownership based on different socioeconomic proxies to predicts inequity of access to healthcare services, which was an added perspective as premium can be considered as a proxy for income. It did so from the beginning of JKN implementation in 2014 until 2018. It is hoped that this paper will provide insights needed to support policy discussions around equity implications of the ways in which JKN was set, using standard methodology. Moreover, beyond Indonesia, the lessons from this paper will be helpful for other developing countries in pursuing UHC, especially on the issue of equity.

Methodology

This study used a quantitative method by way of statistical analysis as its main method. Data for the study were taken from a recently published Book of Statistics of JKN of 2014–2018, in which the first author was the chair of the team who the conducted statistical analysis. The book contains comprehensive statistics from membership and claims data of more than 200 million people. The data was gathered from the National Social Security Agency for Health (SSAH) using its health service and membership dataset.

Two indicators were selected for analysis, namely changes in membership and rates of utilization of outpatient and inpatient services by provinces and by class of hospitalization. Authors analyzed changes over the first five years of JKN implementation disaggregated by the three aforesaid types of JKN members, based on different types of membership class as a proxy for income-level.

In undergoing equity analysis, JKN members were identified by the level of hospital class in their JKN benefit package. This data is available in the membership dataset. Hospital class was used as a proxy for income level. Higher-income households were assumed to be members with 1st or 2nd class hospital

rooms. It is noteworthy that the hospital class only refers to room size and amenities, not medical care, which is to be the same for all members of JKN.

Results

Throughout 2014-2018, there was a significant increase in the absolute number of JKN members (Table 2). This represented an increase in the percentage of the population covered by JKN from 50% in 2014 to 77% in 2018 (5). The first priority in 2014 was to cover the low-income population whose contribution was fully subsidized by the government, represented as the 3rd class. Consequently, the JKN membership was dominated by 3rd class members. The analysis showed the highest growth of membership was for 2nd class member (increased from 25 million to 40 million (60%) in five years), indicating that middle-income people from the informal sector had been increasingly willing to join the JKN. Hence, there was an increasing willingness from middle-income group to become members of the JKN.

In retrospect, the main goal of the JKN is to improve access and utilization of medical care based on the need for health care. Considering this goal, it becomes imperative to focus on changes in service utilization by membership group over the first five years of the JKN. Table 3 presents service utilization rates (visits per 10,000 members) by class of membership for outpatient visits to primary health care facilities and hospitals. The rate of outpatient PHC visit increased from 1,665 per 10,000 members in 2014 to 8,598 in 2018. This was significantly more than outpatient hospital visits, which rose from 1,108 to 2,548 visits per 10,000 members. A possible explanation was that the JKN uses a gate-keeping system to control unnecessary outpatient visits at hospitals. Members must visit a primary care doctor first to be able to see a specialist at a hospital outpatient clinic.

The rate of outpatient visits by the low-income group (3rd class members) demonstrated the highest increase compared to other higher-income groups. The rate of outpatient visits increased 130% for primary health care and 416% for hospital visits. However, utilization of outpatient services by low-income members remains well below that of the higher income groups. For example, in 2018, 3rd class members had less than 10,000 PHC visits per year per 10,000 registered members compared to 20,000 and 30,000 visits per year for 2nd and 1st class members.

Many low-income people had limited access to inpatient care due to financial barriers, which was alleviated in the majority due to JKN. Before 2014, many people had to pay out-of-pocket (OOP) for all services rendered during hospital admission in both public and private hospitals if one was not included within health insurance schemes. The financial threat imposed by a high-cost of healthcare harms the ability of the poorer population segment for accessing healthcare services. There were 42.5% of total health expenditure coming from OOP in 2014 (presumably at the start of JKN), which risks household, particularly the poor segment, into paying catastrophic expenditure for accessing healthcare services. In the year 2018, OOP of total health expenditure decreased by 34%.

As JKN progressed throughout the said years, there was an increase of utilization sought, particularly for specific member group. As seen with outpatient visits, of the three income groups the low-income group (3rd class) experienced the biggest increase in hospital admissions (Exhibit 3). Hospital admissions among the low-income group rose 40%, from 288 admissions per 10,000 members in 2014 to 404 in 2018. In contrast, hospital admission rates among the higher income groups fell during the same period by 12% for the 2nd class and 25% for the 1st class members. The decline in hospital admission rate may be attributed to the case-based payment system and the gate-keeping system in place. However, the hospital admission rates were still higher among the 2nd and 1st class members at 1,045 and 922 admissions per 10,000 members, respectively in 2018.

Inpatient utilization is also influenced by the supply, particularly that of hospital beds. Comparing the beds per 1000 population ratio with hospital admission rates in 34 provinces in 2018, we found that the supply of hospital beds was positively correlated with hospital admission rates (Exhibit 4). Thus, to facilitate access improvement under JKN, it is alluded that supply-side of healthcare also needs to be strengthened.

The Indonesian national health insurance scheme, having been implemented for over seven years, as presented by the study result, has been associated with better healthcare access. This result is emphasized particularly for low-income groups, as seen as the increase of utilization of both inpatient (particularly hospital admission) and outpatient care. Ultimately, JKN needs to be strengthened as its expansion is proven to facilitate better access to care.

Discussion

JKN aims at narrowing the gap in inequity and therefore, this paper's analysis concentrates on the evaluation of how far the JKN is moving towards such direction. After seven years of implementation, it is necessary to evaluate progress towards JKN's main goal to remove financial barriers as regards usage of health services that is based on need instead of household income. Prior to JKN, limited access to care was evidently experienced especially to specialist care which was attributed both to financial as well as access disparities (6, 7).

In general, JKN has seen a remarkable trend in membership expansion. From the study result, it is seen that membership doubled (increased by 110%), from 133 million in 2014 to 208 million population coverage in 2018. JKN, being arguably one of the biggest single-payer SHI had started from 117 million coverage as the result of blending different ad-hoc health insurance schemes, including local health insurance (*Jamkesda)*, for-the-poor health insurance (*Jamkesmas)*, as well as different ad-hoc schemes (8). In precedent, many countries with similar characteristic, including China, Vietnam, and the Philippines, went on similar reform to evolve the existing health insurance schemes into a single-payer SHI for improving coverage and access (9–11). As JKN grows in size to alleviates access to care, it is imperative that equity becomes attention of JKN going forward.

The extensive coverage of JKN is parallel with equity in its service delivery, particularly to its main recipients. From the study, it is concluded that JKN significantly improved access to outpatient and inpatient services, particularly for the poor or 3rd membership class. This finding is consistent with other studies reporting the same positive effects of removing financial barriers to increase equity of health care, especially within lower- and middle-income countries(12–15). This trend was also observed in other low and middle-income countries (LMICs). This indicates that the JKN is on the right track to improve access to health care for low-income households who faced financial barriers before the JKN, therefore championing universal health coverage (UHC).

Despite the achievement in narrowing the gap of access in the lower-income household, the trend was not all seen in other subgroups; in the case of 1st and 2nd membership class of entailing membership of formal and informal workers, JKN was seen to have improved access to only outpatient care. Such decline in hospital admission rates but increased in outpatient visits among such groups may be attributed to the JKN design features of gate-keeping and case-based payment which seek to control overutilization and unnecessary care, saving use of resources for the long run. A similar trend was also observed in the US and China, in which public health insurance prompted increased outpatient care particularly to the poor segment (16, 17). A study in Korea reported that public health insurance is associated with increase of outpatient expenditure but not utilization (18).

In order to facilitate better access, supply-side strengthening becomes imperative in facilitating the rising demands of healthcare due to JKN. In our study, service utilization was improved when there was a necessary supply of hospital beds to accommodate services. This is a considerable challenge to equity in that there is a wide variation of hospital supply beds in Indonesia, with the eastern and most remote part has the highest bed-to-population ratio (19).

Parallel with JKN implementation, which facilitates demand acceleration in healthcare; there is no known disruptive policy at the national level that was necessarily designed to accommodate supply-side readiness. Consequently, a gap in access was previously felt especially in urban area where there was no adequate supply(20). In Japan, after the implementation of national health insurance, there was supply-side boost response particularly for hospital beds, which is akin to our study result (21). Without adequate supplies and infrastructure investment, as evidently shown by countries including Nepal & Ghana, demand-side intervention similar to social health insurance (SHI) will not accelerate the improvement of access (22, 23).

Ultimately, equity is an important consideration for JKN going forward, especially for accelerating the progress of UHC. Myriad studies from other countries provide lessons that an expansion of SHI scheme does not automatically translate to equity in access, particularly to some beneficiary subgroups (24, 25). Moreover, in achieving UHC, it important to look at factors that also facilitates the optimization of SHI, aside from the aforementioned supply-side interventions (26, 27). Thus, through SHI, equity needs to be embedded into the health system framework enabling an acceleration of UHC achievement.

Conclusion

Our study described JKN membership and service utilization trends in JKN in 2014–2018. An expansion of JKN was seen by increased membership from five years running of the system. Moreover, increased access to services was evident, more so for the low-income group, which serves as evidence that JKN is moving in the right direction to improve access to medically necessary health care by increasing coverage. Going forward, as JKN expands, equity needs to be incorporated as JKN target achievement, coupled with the effective supply-side intervention to create better access to all members. This is a crucial step to be taken as Indonesia accelerates its progress towards UHC.

Declarations

Acknowledgement

We thank the Indonesia National Social Security Council for providing the dataset for analysis.

Disclaimer

Analysis and preparation of this paper is funded by the USAID - Health Financing Activity (HFA) project, implemented by ThinkWell Global LLC. The authors thanks to the National Social Security Council (DJSN) for granting access to the Statistics of the JKN 2014-2018.

Ethics approval and consent to participate

Ethical approval was provided by Faculty of Public Health – University of Indonesia for this research on ‘Evaluation of Sustainable Health Financing Schemes through Domestic Funding’ as stated in letter No: Ket-192/UN2.F10.D11/PPM.00.02/2021.

Consent for publication

The authors consent for publication.

Availability of data and material

All data generated in this study are publicly available in recently published Book of Statistics of JKN of 2014-2018.

Competing interests

The authors declare no competing interests.

Funding

This research was funded by the USAID - Health Financing Activity (HFA) under the research on ‘Evaluation of Sustainable Health Financing Schemes through Domestic Funding’.

Authors' contributions

HT conducted the statistical analysis with ER. RRN carried out literature review and desk research as well as writing with ER. FP conducted additional literature review, writing and editing of the manuscript.

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Tables

Due to technical limitations, table 1-4 is only available as a download in the Supplemental Files section.

Figures

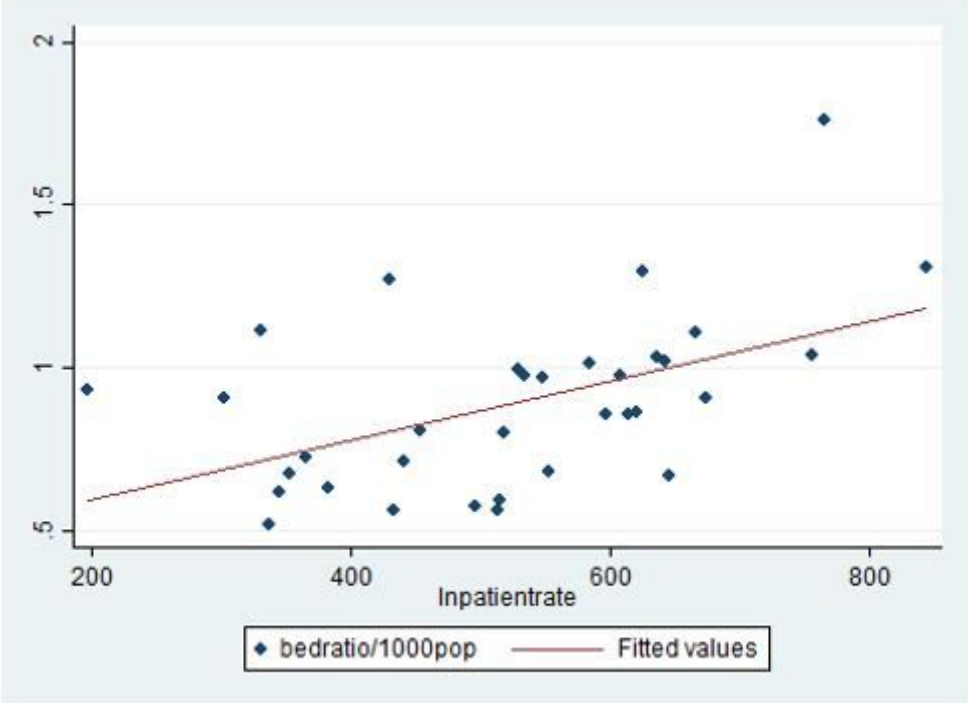

Figure 1

Exhibit 4. The Distribution of Inpatient Rates by Bed - Population Ratios 2018

Supplementary Files

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