

HEALTH INSURANCE INEQUITY IN SELECTED ASIA COUNTRIES

Izzanie M.R.¹, Nada Khaled², Aidalina M.^{3*}

¹Master of Science (Health Service Management) Candidate, Department of Community Health, Faculty of Medicine, University Putra Malaysia.

²Master in Public Health Candidate, Department of Community Health, Faculty of Medicine, University Putra Malaysia.

³Department of Community Health, Faculty of Medicine, University Putra Malaysia.

*Corresponding author: Aidalina Mahmud

Email: aidalina@upm.edu.my

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ABSTRACT

Background: Health insurance is the primary mechanism that enables people to obtain health care services. There are three major types of health insurance involves private health insurance, social health insurance and community-based health insurance.

Aims: This systematic review aims to identify the implication on equity after implementation of health insurance focusing on selected Asian countries. The review is based on the three dimensions of universal health coverage (UHC): population coverage, and service coverage and financial coverage.

Materials and methods: A systematic search for articles was conducted form 4 search engines, Scopus, Science Direct, Proquest, and Google scholar. A total of 13 articles were selected after screenings and equity implications were concluded in three UHC dimensions based on equity index reported or equity improvement observed in time series studied.

Result and discussion: All the three health insurance has different implication on equity between countries or within country. In terms of population coverage, SHI in Thailand showed an equitable coverage. Philippine also reported to have equitable population coverage in terms of geographical while in Vietnam, CBHI showed inequitable population coverage. The financial coverage has showed an inequity of CBHI in India, China, and Thailand. The inequity was also observed for SHI in Philippine, Vietnam and Philippines. More apparent is inequity in PHI for Malaysia and Philippines. The only equitable financial coverage reported was Thailand for its SHI. The final aspect is on service delivery coverage with equity has been observed in CBHI in China and SHI in Vietnam and Thailand.

Conclusion: Social health insurance schemes can be further improved in addressing equity in all UHC aspects. CBHI of which showed some equitable measures for certain population subgroups, such as the poor, and formal workers can collectively be the way to go for SHI.

Keywords: social health insurance, equity, private insurance, universal health coverage.

1.0 Introduction

Healthcare is financed in various ways, most of the countries financed healthcare through mix of healthcare financing mechanism. Healthcare financing mechanism can be divided into six categories i.e. general taxation, earmarked tax, social health insurance, community based health insurance, private health insurance and direct out-of-pocket payments (Doetinchem, Carrin, & Evans, 2010). All these financing mechanism has its own implications on equity depends on the design and the implementation of the financing mechanism. Traditionally, healthcare financing was never being funded by the government: it was either through OOP or health insurance (Kutzin, Witter, Jowett, & Bayarsaikhan, 2017).

The insurance principals are that funds collected from individuals, pooling of those funds and eventually pooling of risks of the individuals contributed to the fund. The funds are then used to pay for health services of those who had contributed. The pooled funds are managed in ensuring the spread of financial risk among contributed members of a pool, instead of individual direct payment at the point of seek care. Risk-pooling is a core characteristic of health insurance, that allow people to get health services according to their needs instead of their ability to pay. This will benefit the contributors from financial catastrophe in a situation of unexpected large health care bill (Sachs & Brundtland, 2001).

The provider payment mechanism for health care can be done in various ways. Provider can be paid directly by individual out of pocket, or indirect way through a variety of insurance plans. Health insurance is the primary mechanism that enables people to obtain health care services and reducing out-of-pocket health expenditure. Thus, insured individuals will use more health services than if they had to pay the whole bill on their own (Xu K, Evans D, Carrin G, 2008). There are three major types of health insurance: private health insurance, social health insurance and community-based health insurance. There are differences in the three types of health insurance, in this paper we focus on the execution and the equity implications for each type.

1.1 Private Health Insurance

Private health insurance is also referred to as “voluntary health insurance” because it is not mandatory. The premium contribution to the fund is pooled among those who voluntarily enrolled and the premium is not fix and individual risk-rated. PHI is often reviewed vision of unequal access, large numbers of uninsured people, and elitist health care for the rich. Experience indicates that unregulated or poorly designed private health insurance systems can indeed exacerbate inequalities, provide coverage only for the young and healthy. However, some may argue that when the private insurance appropriately managed, it can play a positive role in improving access and equity. For example, out-of-pocket spending on health services is the most common form of health financing specially in developing countries and represents a significant financial burden for individual. Instead of large spending through OOP when seeks care, people can opt for pre-payment mechanism in PHI which can provide access to financial protection (Sekhri, 2004).

1.2 Community-based health insurance

Community-based health insurance it's a mechanism for health-financing at the sub-national/community level, e.g. households in a village or district; socio-economic, professional or ethnic groups, CBHI can thus be considered as a preparatory step on the way to universal. Membership in CBHI schemes is usually voluntary and schemes are typically run on a non-profit basis. Individual usually pays a small contribution in terms of fees that charged by local health services. It considered as type of voluntary health insurance that organized at community level. From equity perspective, usually population coverage is limited, difficult to reach, and only extended to a small percentage of the population. Beside the poor may be excluded unless subsidized(Noubiap, 2013).

1.3 Social Health Insurance

Social health insurance (SHI) unlike PHI and CBHI, it's a scheme that with key characteristic that is mandatory. It is mainly financed through a tax on payroll, but often complemented by public subsidies. Resources are pooled ideally at the national level, offering some level of cross subsidisation between people who have contributed. SHI has traditionally started by insuring workers. A further nationally organized expansion of social health insurance to the self-employed and non-formal sector is especially demanding, in Low and Middle Income Countries with large informal sectors unable to take part in SHI, this leads to unequal population coverage(WHO, 2003).

Health insurance is an important component to achieve Universal Health Coverage. UHC has been defined as a condition where all people who need health services, prevention, promotion, treatment, rehabilitation, and palliative care are receives them, without undue financial hardship (WHO, 2010). In the fifty-seven World Health Assembly in 2005, the resolution was made on sustainable health financing, universal coverage and social health insurance. It urges the member states to ensure health care financing that include prepayment mechanism in addressing financial risk protection. It also mentioned that healthcare financing must ensure adequate and equitable good quality health care for the participants. Objective of health-financing policy is equity in financing: households contribute to the health system on the basis of ability to pay.

1.4 Implications on Equity

Equity can be defined as creating opportunities and removing barriers to achieving the health potential of all people, it's about fairness and justice and implies that everyone should have an equal opportunity to attain their full potential for health or for the use of health care (Chang, 2002).

There are two types of equity horizontal and vertical, horizontal equity implies that distribute the same treatment to people in an identical situation e.g. if two diabetic patients should both pay the same amount of charged fees, Horizontal equity makes sure we don't have discrimination on the grounds such as race, gender or income. While vertical equity is concerned with redistributing income within society. It implies that people with higher incomes should pay more tax. Vertical equity requires proportional or progressive. For

example, income charged helps improve vertical equity by charging according to how much people earn. High-income earners may a higher proportion of their income(Elkins, 2006).

Equity in healthcare is a multidimensional concept, can be discussed from three dimensions, which includes equal access to care whether spatial (geographical) or non-spatial (timeliness), equal cost, and equal quality of care for all. Equity in quality, everyone has to gets the same quality of care regardless of socioeconomic status or geographical distribution. For instance, type of services provided under different insurance types should not influence the quality of services or else the purpose of protecting life will not be achieved. Equity in non-spatial access involve whether insured group can benefit from health insurance in terms of improved access to services in term of availability of the facility or in time spending to find the appropriate facility when time is needed for example availability of healthcare in rural area so they don't need to spend time in travel to urban facilities(Huber et al., 2008).

Equity in spatial access concern with geographical access, fair and justice distribution of health care services are essential to equity in access to health care. Equity relates to the idea that the distribution of services should be based on health care need, for example lack of healthcare facilities is limited access to healthcare services in rural area(Ayanda, 2014). Equity in cost define equity on the finance side in terms of a requirement of payments for health care, its concern with reducing the cost sharing and fees while obtaining health services which includes premium contribution, copayment, affordability and capped coverage. For example, high copay may lead to limited access to health services(Rice et al., 2018).

Also, equity can be discussed from the UHC dimensions perspective, universal health care defined as a system that provides all citizens with adequate health care at an affordable cost is a universal priority (WHO, 2010). Also can be defined as access to key promotive, preventive, curative and rehabilitative health interventions for all at affordable cost, thereby achieving equity in access(World Health Assembly Resolution, 2005). It is important to note that universal coverage has three dimensions, population coverage, which means covering every citizen with access to necessary care, service coverage of the essential services needed and financial coverage which means reduce the cost sharing and fees with obtaining health services(Kutzin, 2013).

In the following sections, we applied our findings based on UHC cube for Malaysia, Philippine, Vietnam, Thailand, Indonesia, China and India. In each country the UHC cube dimensions were analyse the equity in terms of population coverage, service coverage and financial coverage.

2.0 Research objective

This systematic review aims to identify the implication on equity after implementation of health insurance focusing on selected Asian countries.

3.0 Methods

Literature review was done in a series of steps using systematic review method with the focus on three main health insurance mechanisms. Relevant studies were identified using literature search based on the formulated research question from the electronic databases, PubMed, Science Direct and Google Scholar. The phrases used for literature search were, “social health insurance”, “equity”, “accessibility”, “financial protection”. A total of 13 articles and reports were identified, selected and analyzed.

3.1 Equity Analysis

Equity implication was assessed based on 3 domains which are (1) population coverage, (2) service coverage and (3) financial coverage. In each article, health insurance program(s) implemented that relates to the equity findings has been identified. The results of the study article were summarized as an outcome to the implementation of the health insurance program. Some of the countries had multiple health insurance program but the analysis was conducted to see the implication of certain health insurance program.

The rule of concluding equity implication for time series studies is, in particular domain, it will be considered equitable when countries shows improvement from inequitable to less inequitable, from inequitable to equitable or, from equitable to more equitable. On the other hand, for studies which only measures equity in a particular year, the equity implication is concluded based on the equity findings reported in their study.

4.0 Results

A total of 13 articles were included for this systematic review. There were three studies each from Philippine and China, two studies each from Indonesia and Thailand and one study each from Malaysia, Vietnam and India. Majority of these studies are cross sectional surveys and only one policy notes. Most of the studies were published after 2006. Some of the studies use panel data for the equity analysis since 1990s. The studies were presented in Table 1 by different health insurance scheme in each country with the description of the scheme and the findings on the equity. We conclude on the equity implications based on the UHC dimensions.

PRISMA Diagram of the literature review

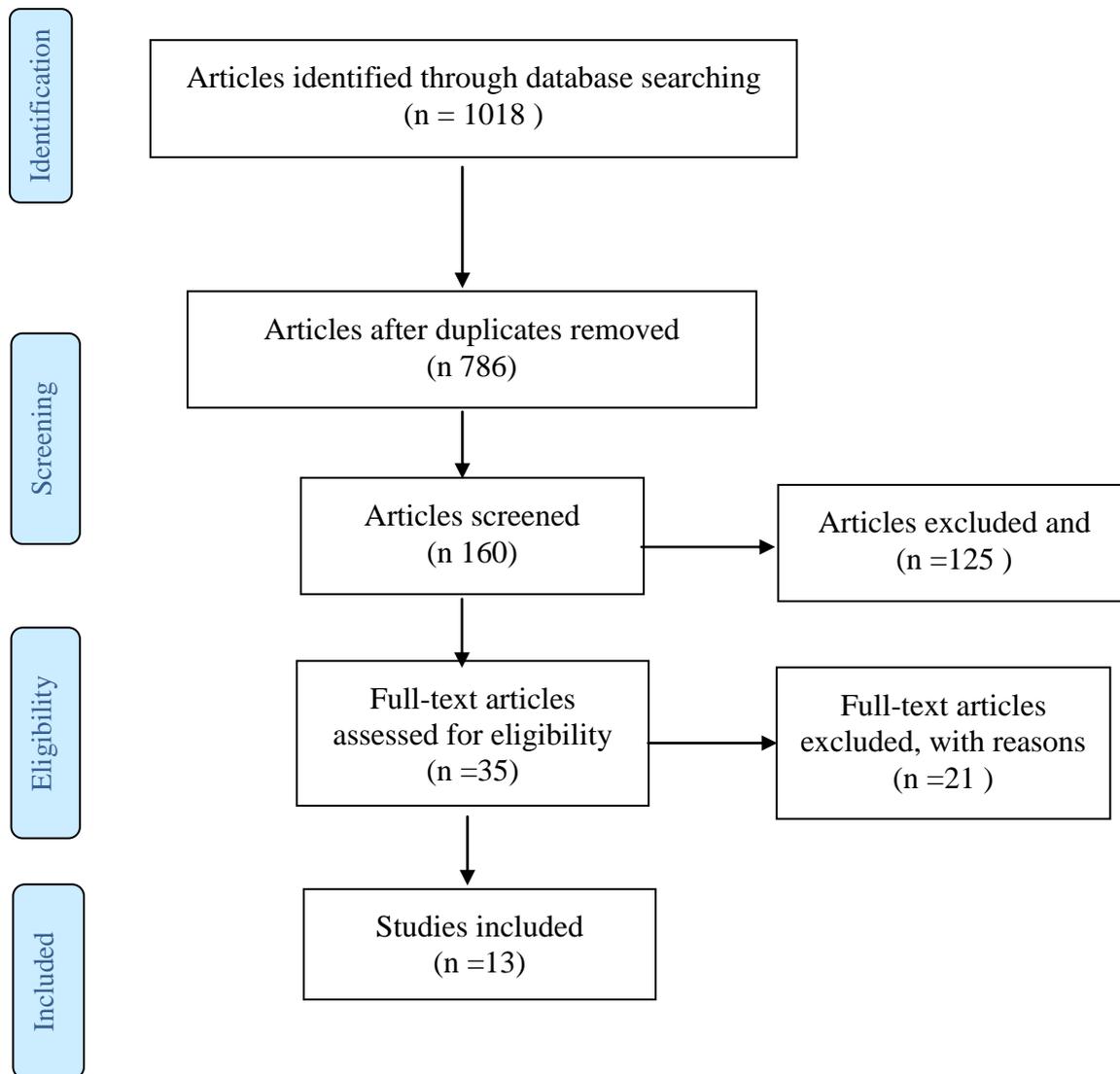


Figure 1: Flowchart of the literature review process

Search keywords: social health insurance, equity, private insurance, universal health coverage.

Search engine: Scopus, Science Direct, Proquest, and Google scholar.

Table 1: Equity implications by types of health insurance

Articles and data in year	Country/scheme	Description	Outcome	Equity implication
Thi Thuy Nga, N., FitzGerald, G., & Dunne, M. (2018). Family-Based Health Insurance for Informal Sector Workers in Vietnam: Why Does Enrolment Remain Low? Data: 2016	Vietnam CBHI	<ul style="list-style-type: none"> • “Family Health Insurance [FHI]” • Compulsory insurance • Coverage: non-poor informal sector workers (ISWs) and their families 	Low enrolment in family-based health insurance scheme at both the demand and supply sides, due to inability to pay the premium, lack of information, perceived poor quality of primary health care services, and complicated enrolment procedures.	Not equitable (population coverage, quality of care)
Ulep V. G., and Dela Cruz N. A. (2016). Analysis of out-of-pocket expenditures in the Philippines -Policy Notes. Data : 2000 to 2012	Philippines SHI	<ul style="list-style-type: none"> • The Philippine Health Insurance Corporation (PhilHealth) • It is a tax-exempt, government-owned and controlled corporation of the Philippines, • Attached to the Department of Health • Coverage: whole population. 	Household out-of-pocket health expenditures increase over the years. Lower income groups had higher annual growth rate of OOP spending. However, high income groups has large shares of OOP spending.	Not equitable (financing)
Obermann, K., Jowett, M., & Kwon, S. (2018). The role of national health insurance for achieving UHC in the Philippines. Data: 1996 to 2017	Philippines SHI	<ul style="list-style-type: none"> • The Philippine Health Insurance Corporation (PhilHealth) • It is a tax-exempt, government-owned and controlled corporation of the Philippines, • Attached to the Department of Health • Coverage: whole population. 	Population enrollment has been increase from less than 50% in 1995 to 90% in 2017.	Equitable (population coverage)
Quimbo, S., Florentino, J., Peabody, J. W., Shimkhada, R., Panelo, C. and Solon, O. (2008). Underutilization of Social Insurance among the Poor: Evidence from the Philippines	Philippines SHI	<ul style="list-style-type: none"> • The Philippine Health Insurance Corporation (PhilHealth)“ • It is a tax-exempt, government-owned and controlled corporation of the Philippines, 	Failing to reach a significant proportion of households which are poor (e.g. low education). Resulting in underutilization.	Not equitable (population coverage)

Data: 2003 to 2007		<ul style="list-style-type: none"> • Attached to the Department of Health • Coverage: whole population. 		
Limwattananon, S., Tangcharoensathien, V., Tisayaticom, K., Boonyapaisarncharoen, T., & Prakongsai, P. (2012). Why has the universal coverage scheme in Thailand achieved a pro-poor public subsidy for health care? Data: 2003-2007 & 2009	Thailand SHI	<ul style="list-style-type: none"> • “UC scheme” • Compulsory insurance • Coverage: those not in the 2 other schemes (civil servants and formal sector employees) • Financed through general taxation 	The scheme enables the poor to come forth for treatment	Equitable (population coverage, service coverage and financial protection coverage)
Somkotra, T., & Lagrada, L. P. (2009). Which Households Are At Risk Of Catastrophic Health Spending: Experience In Thailand After Universal Coverage. Data: 2006	Thailand SHI	<ul style="list-style-type: none"> • “civil servant medical benefit scheme” and “social security system” • Compulsory insurance • Coverage: those in the civil servants and formal sector employees • Financed through employer/employee contribution 	Households in the higher quintiles—especially the richest—are more likely than the poorest to incur very high health expenditures	Not equitable (financing)
Health Policy Plus and TNP2K . (2018). Has Indonesia’s National Health Insurance Scheme Reached the Most Vulnerable? A Benefit Incidence Analysis of JKN Hospital Expenditure Data: 2014-2016	Indonesia SHI	<ul style="list-style-type: none"> • Jamanan Kesehatan Nasional (JKN) • Compulsory insurance • Coverage: whole population • Premium based on income and set criteria 	Benefit incidence analysis showed that JKN hospital expenditure has becoming increasingly inequitable (Subsidy given to hospitals were utilized by the rich, because the rich come for the service more than the poor).	Not equitable (financing, service)
Johar, M., Soewondo, P., PujiSubekti, R., Satrio, H. K., & Adji, A. (2018). Inequality in access to health care, health insurance and the role of supply factors. Data: 2011 to 2016	Indonesia SHI	<ul style="list-style-type: none"> • Jamanan Kesehatan Nasional (JKN) • Compulsory insurance • Coverage: whole population • Premium based on income and set criteria 	After implementation of scheme, there is narrowing of access gap between urban and rural population.	Equitable (service coverage)
Rannan-Eliya, R., Anuranga, C., Manual, A., Sararaks, S., Jailani, A. S., Hamid, A. J.,	Malaysia	<ul style="list-style-type: none"> • Voluntary insurance • Coverage: those who can 	Financing health through private health insurance was highly	Not equitable (financing)

Razif, I. M., Tan, E. H., Darzi, A. (2016). Improving health care coverage, equity, and financial protection through a hybrid system: Malaysia's experience. Data: 2009	PHI	<p>afford to pay premium</p> <ul style="list-style-type: none"> Individual risk-rated premium 	concentrated among the rich contributed to the overall pro-rich private health financing.	
Zhou, Z., Su, Y., Gao, J., Campbell, B., Zhu, Z., Xu, L., & Zhang, Y. (2013). Assessing equity of healthcare utilization in rural China: Results from nationally representative surveys from 1993 to 2008. Data: 1993,1998,2003,2008	China CHBI	<ul style="list-style-type: none"> “NCMS” Community: rural Premium paid by government and individual. Managed by local government. 	<p>Before the introduction of the NCMS scheme, utilization of both outpatient and inpatient services was pro-rich in rural China, initially.</p> <p>After the introduction of the NCMS scheme, The inequity of utilization of IP and OP decreased (from 2003-2008).</p>	Equitable (utilization)
Yang, W. (2013). China's new cooperative medical scheme and equity in access to health care: Evidence from a longitudinal household survey. Data: 2004, 2009	China CHBI	<ul style="list-style-type: none"> “NCMS” Community: rural Premium paid by government and individual. Managed by local government. 	After the implementation of the scheme, there is reduction in inequity in folk doctor care and preventive care.	Equitable (utilization)
Qin, X., Luo, H., Feng, J., Li, Y., Wei, B., & Feng, Q. (2017). Equity in health financing of Guangxi after China's universal health coverage: Evidence based on health expenditure comparison in rural Guangxi Zhuang autonomous region Data: 2009 and 2013	China CHBI	<ul style="list-style-type: none"> “NCMS” Community: rural Premium paid by government and individual. Managed by local government. 	Even after the implementation of the scheme, the overall health-care financing system was found to be regressive.	Not equitable (financing)
Azam, M. (2018). Does Social Health Insurance Reduce Financial Burden? Panel Data Evidence from India Data: 2005 to 2012	India CBHI	<ul style="list-style-type: none"> “RSBY” Community: of the poor rural/urban Premium paid by government. Managed by public or private insurance company. 	<p>Targeted for the poor but there is no evidence of reduction in OOP expenditure.</p> <p>Example: RSBY beneficiary patient spend less on medicine in rural areas but no statistically significant impact in urban areas.</p>	Not equitable (financing)

5.0 Discussion

This systematic review looked into the equity implications of three types of health insurance in terms of population coverage, service coverage and financial coverage. This review was only carried out among published research studies on health insurance schemes from selected Asian countries, which are bracketed under the middle income countries. The published literature from China, India, Thailand, Indonesia, Philippines, Vietnam and Malaysia were reviewed. These countries health insurance schemes were categorised according to social health insurance, private health insurance and community-based health insurance. The equity implications were summarised based on the three dimensions of UHC; (1) population coverage, (2) service coverage and (3) financing coverage.

i. Population Coverage

In April 2008, Indian Ministry of Labour and Employment (MoL&E) launched the 'Rashtriya Swasthya Bima Yojana' RSBY, to provide insurance coverage for inpatient care to poor families (or 'Below Poverty Line'). The coverage was limited to a maximum of five family members. As of September 2016, more than 41 million health cards (reflects the RSBY enrolment) had been issued. These program was participated by 460 districts and covers almost 150 million poor people. Nationally, the share of eligible households enrolled (enrolment ratio) was 57%. However, there was huge variation across districts where many districts in Chhattisgarh and Kerala had enrollment ratios of nearly 90% while only 3% in Kannauj and 6% in Kanpur Dehat districts in Uttar Pradesh (Karan, Yip & Mahal, 2017).

In China, the new rural cooperative medical scheme (NCMS) was established in 2003 and was mainly subsidised by the government. The NMCS and two other health insurance schemes (Urban Resident Basic Medical Insurance and Urban Employee Basic Medical Insurance) makes up China's SHI (Meng, Fang, Liu, 2015). The NCMS is a successor to previous rural health insurance schemes in terms of financing health. In 2008, nearly 90% of the rural population was covered by the NCMS which accounted for 68% of total population in China. After the NCMS was set up in 2003, its coverage of the population expanded from 8 million in 2003-2004, to 179 million in 2005, 815 million in 2008, and 833 million in 2009. These represents a rapid expansion from 3% to 90% in five years (Qingyue & Shinglan, 2013).

Thailand Universal Coverage Scheme (UCS) launched in 2006, is a renamed of 30-Baht Universal Coverage Scheme (30B) that has been implemented in 2002. It covers the rest of the population who are not covered under Civil Servant Medical Benefit Scheme (CSMBS) and Social Security Scheme (SSS). Approximately 9% of the total population is covered under the CSMBS. The SSS covers all formal employees and self-employed with another 16%. The remaining 75% of the Thai population, the largest share, is covered under the UCS.

ii. Financial Coverage

The universal financial coverage of a SHI system based on ability to enroll and collect premiums from the non-poor, and the government's capacity to subsidize premiums for the poor or near-poor. In Vietnam the premium for formal employees is set at 6% of salary, with employees contributing 4% and employers contributing 2%. On other hand, enrollment of the self-employed and informal workers based on voluntary contributions. Enrolling non-formal workers is a significant hurdle to universal coverage with premiums often subsidized by government according to an ability to pay (Palmer, 2014). Enrollment has remained low among persons whose enrollment is voluntary. As a result, households face financial risk due to high out-of-pocket payments for health care (Nguyen & Hoang, 2017). The premiums of the poor and near poor are usually fully or partially subsidized by government; the rate is at 3% of the minimum wage and is paid by the state. The premiums received are often insufficient to cover benefits for those who in needs. A copayment of 20% was re-introduced in 2010 for all target groups except for meritorious 7 persons and children who were exempt. Retirees, the poor, and social beneficiaries incurred a copayment of 5% (Palmer, 2014).

In Philippine, the incidence of catastrophic payments has trebled since 2000, from 2.5 to 7.7 percent. The percentage of people impoverished by health spending has also increased and, in 2012, out-of-pocket spending on health added 1.5 percentage points to the poverty rate (Bredenkamp & Buisman, 2015). Poor households in the Philippines are spending a higher share of their disposable income on health care as compared to the better off. While expenditures on drugs and medicines account for the biggest share for both poor and rich households (World Health Organization, 2011). PhilHealth accounts for only 14% of total national health expenses against a target of 30%, leaving most (55.8%) health expenditures to be shouldered out-of-pocket even accounting for other forms of insurance (Marfori et al., 2019)

Beneficiaries of RSBY in India pay an annual registration fee of INR 30 (approximately US\$0.50) per household. The scheme is funded by contributions from the central and state governments and managed by public and private insurance companies, selected via competitive bidding. As of 2017, 11 insurance companies (4 public and 7 private) manage the scheme across India (Karan et al., 2017). The results has shown that no reduction of OOPE spending among the insured groups. A study has shown that irrespective of the insurance status, hospitalisation was higher in private health facilities despite high OOPE. People under publicly funded insurance schemes including RSBY, were hospitalised in private health facilities (53%) more than public facilities (47%). The findings suggest the dominance of private providers in the insurance market. The larger dependence on private health care despite high OOPE perhaps could be the results of poor functioning of public health system (Mahapatro, Singh & Singh, 2018).

The NCMS in China has seen a rapid growth in premiums since its inception. In year 2003 to 2005, NCMS collected about 30 RMB per capita on average which one-third from individual and another two-third from government. was collected between 2003 and 2005. This premium has increased to 100 RMB in 2009 and subsequent increment to 340 RMB in 2013 and the Government subsidised 80% of the premiums (Qingyue & Shinglan, 2013). Due to the fact that NCMS funds are pooled by counties, it affects the risk sharing

between rich and poor counties (Meng et al., 2015). Although the premium payment is subsidised by the government but the contribution is very much depending on counties that may results in inequity in financing.

The Indonesia's national health insurance scheme, Jaminan Kesehatan Nasional, or JKN, launched in 2014, with an aim to address existing inequities in access and quality of healthcare, ensuring that all citizens, especially the poor and near-poor can access quality care without facing financial hardship. However, after implementation, variations in healthcare use lead to the inequities in expenditure across socioeconomic group. In 2016, inpatient use was 146% higher among the insured rich compared to the insured poor while outpatient use was 24% higher among the insured rich compared to the insured poor (Health Policy Plus and TNP2K, 2018).

In Thailand, CSBMS and SSS are two schemes with higher financial coverage compared to UCS. The CSBMS is financed through general tax while SSS through contribution from employer, employee and government. UCS also funded through general tax with small contribution from certain category of beneficiaries. The beneficiaries of CSBMS and SSS have access to public and private health centres with comprehensive benefits package compared to UCS (Jaroensubphayanont, 2017). Findings has showed that high CHE in UHC groups was due to their choice of accessing expensive care in the private facilities.

The PHI market in Malaysia is oligopolistic, with the top three insurers accounting for more than 50 percent of the market. According to National Health and Morbidity Survey 2015, approximately one-third of the Malaysian population had some form of private health insurance (PHI) or employer- provided health coverage; the share covered by PHI was 23.6 percent. Due to its voluntary basis health insurance, only those who can afford to pay premium will enroll into the scheme particularly to get access to private hospitals (Atun et al., 2016).

iii. Service Delivery Coverage

In Vietnam remains an inequity in maternal and child health outcomes between different segments of the population. these inequalities attribute to poverty and lower education as well as to barriers to health service access (Van Minh et al., 2016). Health care distribution that benefits the rich greatly exceeds distribution that benefits the poor, where there is inequities in public health care utilization which benefit better-off people in the slum areas in urban area in Vietnam (Kien, 2015).

In Philippine, despite 92% population coverage in 2015, PhilHealth utilization has consistently lagged behind in the poorest quintile compared to the richest, respectively at 18% versus 33% in 2003, increasing in disparity to 33% versus 88% in 2013 (Marfori et al., 2019)

When NCMS in China was launched in 2003, general outpatient services were almost entirely excluded and only catastrophic medical treatments (mainly inpatient services) were covered, but outpatient services were gradually added with the increase of funding (You & Kobayashi, 2009). About 70% of the NCMS counties now offers inpatient and outpatient care and the remaining 30% counties offering coverage for inpatient care only.

It also includes reimbursed drug lists. The design and implementation of the health care package and drug lists is mainly the responsibility of each of the NCMS counties that are the unit of fund pooling and management. There were about 400 in the list covered by the NCMS (Qingyue & Shinglan, 2013).

In Indonesia, compared to the uninsured, JKN members are significantly (and increasingly) more likely to use inpatient. Prior to JKN, greater differences in likelihood of inpatient use existed between different island groups and between different socioeconomic groups. In recent years, these differences have narrowed. JKN members are more likely to seek outpatient care than the uninsured, though this likelihood has not increased over time. Differences persist in likelihood of outpatient use by island grouping. Having JKN increases the likelihood of using outpatient by 32% for poor, near-poor, and middle socioeconomic individuals compared to uninsured individuals. Outpatient use at hospitals increased in provinces after 2014. By contrast, outpatient use remained relatively unchanged at primary healthcare centers. This indicates that supply-side factors increase likelihood of outpatient use at hospitals (Health Policy Plus and TNP2K, 2018).

All the three health insurance has different implication on equity between countries or within country. In terms of population coverage, SHI in Thailand showed an equitable coverage. Philippine also reported to have equitable coverage in terms of geographical but not equitable in terms of socioeconomic status of the population while in Vietnam, CBHI showed the inequity in population coverage. The financial coverage has showed an inequity of CBHI in India, China, and Thailand. The inequity was also observed for SHI in Philippine and Vietnam. More apparent is inequity in PHI for Malaysia and Philippines. The only equitable financial coverage reported was Thailand for its SHI. The final aspect is on service delivery coverage with equity has been observed in CBHI in China and SHI in Vietnam and Thailand. The dimensions of UHC provide better understanding on the equity outcome based on types of health insurance.

6.0 Conclusion and recommendation

Based on the discussion of the findings, we conclude that of SHI is overall an equitable method for health financing. Nonetheless, the schemes can be improved further in addressing equity in all UHC aspects. On the other hand, CBHI is equitable for its target groups and Private health insurance seen in this review is not an equitable health insurance scheme. Further studies need to be conducted in identifying factors contributing to the inequity of the health insurances.

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