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Social Health Insurance Policy of Nepal: Issue of Equity and Equality

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Abstract

The Government of Nepal implemented a social health insurance program (SHIP) in 2016 to achieve Universal Health Coverage. The objective of this paper is to obtain the opinion of the respondents towards the existing premium rate that has been charged to the members of the social health insurance program. The study followed a cross-sectional descriptive study designed. Information was collected from 360 households using the purposive sampling method. The sample was selected among the households who were interested in buying SHIP within a year but till they have not purchased the health insurance policy. A structured questionnaire was used to collect the opinions of the respondents and Chi Square was used to examine the association between the variables. The study concludes that the opinion of respondents towards the equity of premium for SHI is significantly associated with education and profession but not associated with gender, age, caste, health-related training, life insurance policy, agriculture insurance policy, and commercial health insurance. The majority of respondents opined that the

premium should be based on the income of the household, as opposed to being equal among those with disparate incomes. The majority of respondents concurred that the current practice of imposing equal premiums on families having dissimilar incomes is unfair.

Keywords: Equality, Equity, Justice, Premium, Social Health Insurance, Universal Health Coverage

JEL: D63, G22, I13

INTRODUCTION

The economic disparity in Nepal is deep rooted as the value of Gini coefficient was 0.49 during 2010/11 (CBS, 2010/11). More than 8.1 million people are living below the poverty line. The wealth is concentrated with top 20 per cent of population who owns 56 per

cent of the wealth, and the bottom 20 per cent owns only 4 per cent of the total wealth (Oxfam, 2019). Nepal is listed as a least developed country having per capita income \$ 1,191 (MoF, 2021). The absolute level of poverty was 18.7 per cent in FY 2017/18 and multidimensional poverty has declined to 28.6 per cent (MoF, 2020).

Nepal has a long history of community-based health insurance and micro health insurance scheme. Although such schemes were operated by various organisations viz. Cooperatives, Hospitals, Self Help Group and volunteer organisations in fragmented fashion and the service coverage has been found limited (ILO, 2011). In addition, Employees Provident Fund initiated to provide medical support to depositors through insurance company since 2018, extended the support to spouses too since 2023 (Share Sansar, 2023). Furthermore, commercial health insurance companies have initiated medical insurance plan since 2010s. Almost all insurance plans have limited coverage, pay compensation to insured after submission of medical bills (Acharya et al., 2020, 2021).

With the aim of Universal Health Coverage to all people, Government of Nepal introduced Social Health Insurance Program (SHIP) in 2016 (HIB, 2019). Across the globe, there are different models of sharing of the social health insurance cost. South Korea followed "low premium for low-income class and high premium for higher income class" approach while Nepal follows "equal premium to different income classes" approach. In both approaches, health care fund is pooled by government treasury and health service users' contribution in terms of premium.

The health financing mechanism of Nepal is hybrid in nature as it is partially contributed by users (self-contribution), commercial insurance companies, developmental organisations, and government (HIB, 2020). Social Health Insurance program has been implemented by Health Insurance Board (HIB) since 2017. First of all, one should get membership of HIB paying contribution amount, medical services is available in cashless mode, first service point should be the nearest health centre and referral slip is compulsory for the medication in specialized hospital except the first service point hospital. Most of the medicine are available free of cost from the hospital pharmacy but some of the medicine needs to purchase outside the hospital paying own money. Some of the diseases are not covered by the SHIP.

In the inception phase, the program was implemented in three districts viz. Ilam, Baglung and Kailali in 2016. In second phase in 2017 the program was extended in five new districts namely Baitadi, Achham, Palpla, Myagdi and Kaski. Further 22 districts were covered in third phase during 2018, after that 10 districts got the service of HIB in fourth phase (2019) and continued its program in 14 new districts in 2020 and in 2021 it provided services to 19 districts. In 2023, rest of two districts Kathmandu and Bhaktapur also were covered by the program.

The premium for the health insurance scheme is equal to all except the age above 70, disabled, staff of HIB, family having poverty card, and Female Health Volunteer. Health Insurance Regulations, 2018 provisioned the premium to be charged one per cent of basic salary of the employee or Rs. 10,000 which is lower but the provision has not been implemented till date (Acharya, et al., 2023).

Since the participation is voluntary, majority of the population has not been enrolled in the program and renewal rate is not enthusiastic (Acharya et al., 2023). After four year, the cost and benefit structure has been changed. Minimum premium and additional premium per person has been increased by 40 per cent and 65 per cent respectively. Maximum benefits to family and old aged citizen both also increased by 100 per cent in 2019. The cost (premium) and benefits (amount of total health care services) in inception and after four year is presented in Table 1.

Table 1

Premium- Benefits of Social Health Insurance Program during FY 2016-2023(Amount in NRs)

Particulars	Previous	Current	Changed (%)
Date of Commencement (AD)	7-Apr-16	14-Apr-19	
Minimum premium (up to 5 members)	2,500	3,500	40
Additional premium per family member	425	700	65
Maximum benefits for 5 persons	50,000	100,000	100
Maximum benefits in a family	100,000	200,000	100
Additional benefits for citizens age above 70	100,000	100,000	-
Age above 70, disabled, staff of HIB and extreme poor family		100% free	
Female Health Volunteers (FHV)		50% free	

Source: Annual Reports, Health Insurance Board.

USD 1 = NRs. 132.25 (Aug 2, 2023)

Globally, different social health insurance financing models viz. Bismarck model, Beveridge model, National Health Insurance model and Out of Pocket Expenditure (OOP) models are in practice (Wallace, 2013). Sufficient attention has been paid by academicians in income inequality, health costs and its impact on the health status. In Nepal, economic status among population is immensely different but premium for the social health insurance program is same. Merely researches have been carried out on pricing of social health insurance in the context of Nepal.

The study provides valuable input to policymakers to rethink on existing premium structure and design an impartial premium policy. Equitable premium may attract more people in the SHIP and provide satisfaction to different economic classes of people as per the utility theory. The study is first of its kind in Nepalese context so that it gives insightful thoughts to the government agency formulating the premium related policies. The findings of the study also will be useful to researchers and stakeholders.

LITERATURE REVIEW

The term "equality" and "equity" are more discussed in the area of universal health coverage (Paul et al., 2019). The relationship between income inequality and health financing on public health is well established (Lynch et al. 2004; Wilkinson and Pickett, 2006; Kondo et al., 2009).

Millions of households struggle to finance their healthcare expenses and many of them are driven below the poverty line by such expenses (WHO, 2015). Out-of-pocket health expenditure led to poverty, particularly in low-income countries (Wagstaff, et al., 2020). In the context of Nepal, there is limited evidence on the magnitude of catastrophic health payments and the poverty impact of OOP. A study by Gupta et al. (2014) reveals that the health-financing system in Nepal has become regressive over the years, as the share of the bottom two quintiles in the total number of households facing catastrophic burden increased by 14 per cent between 1995 and 2010.

A study by Schenkman and Bousquat (2021) established the dissociation between the distribution of health outcomes and the overall level of health of the population characterizes a devastating political choice for society, as it is associated with high levels of segregation, disrespect and violence from within. The study further recommended that countries should prioritize health equity, adding value to its resources, since health inequities affect society altogether, generating mistrust and reduced social cohesion.

Efficiency, equity and equality are three common ethical and political contents for health policy (Culyer, 2015). Whereas equity covers various levels and types, many global UHC documents fail to define it properly and to comprehend the breadth of the concept.

While equity is widely referred in global and country-specific UHC policy documents, its multiple dimensions result in a rather rhetorical utilisation of the concept (Paul et al., 2019). Jutz (2015) indicates that income inequality has more impact on health inequalities than social policies. On the contrary, social policies seemed to matter to all individuals regardless of socio-economic position since it is significantly positively linked to overall population health.

Some countries including South Korea practices the equitable health insurance premium to some extent, some of the countries have applied equal health insurance premium, and some countries provide the health facilities free of cost. According to Lee (2003) Korea achieved universal health coverage within 12 years which is possible due to the redistribution of wealth through the equitable health care cost. Redistribution of income from rich to poor, whether within or between countries, will increase the health of the poor more than it hurts the health of the rich, and thus improve average national or world health (Deaton, 2003).

DATA AND METHODS

Study design: The study employed a descriptive research approach. This was the cross-sectional study design based on quantitative method, grounded in the positivist worldview.

Study area: The geographical study area is Pokhara Metropolis of Kaski district, Nepal and the domain of the study is the social health insurance. We have purposively selected Kaski district among 5 districts where SHI program has been launched in the second phase.

Study population: The residents of Pokhara Metropolis, Ward (lowest unit of administration) no. 29, who had not purchased social health insurance policy till study period (during January to July, 2018) but are ready to buy within a year were considered as a population of the study. According to the HIB (2017), only 13 per cent of the population in Kaski was enrolled in the SHI, leaving the vast majority (87%) unenrolled. As a result, we chose this unenrolled population as our study population because understanding their motivations and perception on premium can help insurance providers and policymakers modify their services and policies to meet the needs of this particular section of the population.

Sampling technique and sample size: Two stage sampling technique was adopted to select the participants. First of all, potential households (those who have not purchased health insurance scheme but are willing to do so within a year) were identified with the assistance of Enrolment Assistants working for Health Insurance Board in the study area.

After excluding households from insured people, a sampling frame was created for households that were willing to purchase a health insurance scheme within the year. We discovered that a total of 5,000 households did not purchase the scheme, and we figured out that 50 per cent of the total HHs (i.e. 2,500 HHs) were interested in purchasing the policy. We approached every sixth household in these 2500 households to select participants using systematic sampling. In the second stage, either the household head or a member who expressed an interest in SHI was purposefully and conveniently chosen for the study. Raosoft calculator (<http://www.raosoft.com/samplesize.html>) estimated the sample size of 365 based on 13 per cent rate of the population in Kaski enrolled in the SHI, with the assumption of 5 per cent margin of error, 95 per cent confidence level, design effect of 2, and 5 per cent non-response. We approached for 365 households, but 360 household responded properly.

Data collection tool: A structured questionnaire was designed and pre tested in a location other than study area. The reliability of questionnaire was assessed through split half method. Validity of the questionnaire was confirmed by the experts. Questionnaire included the demographic information of the respondents, income level, and their opinion towards the concept of equal premium for all family members, regardless of their varying income levels and ownership of separate insurance plans.

Study variables and their measurement: The study included 13 different variables known as predictor variables and their perception toward the same premium across various income levels.

Table 2

Study variables and scale of measurement

Variables	Scale of measurement
<i>Gender</i>	<i>Male, female</i>
<i>Age group</i>	<i>Up to 25 Years, 26 to 35, 36 to 45, Above 45 years</i>
<i>Ethnicity</i>	<i>Janajati, Dalit, Brahmin Chhetri/others</i>
<i>Education</i>	<i>Literate and less (No schooling), SLC (10 year of schooling), Intermediate level (+2 year of schooling), Graduate (Bachelors and above)</i>
<i>Occupation</i>	<i>Agriculture, Job, Business, Retired/others which include housewives and unemployed</i>
<i>Income Level</i>	<i>Q1, Q2, Q3, Q4, Q5</i>
<i>Health Training</i>	<i>Yes, No</i>
<i>Commercial Health Insurance</i>	<i>Yes, No</i>
<i>Auto insurance</i>	<i>Yes, No</i>
<i>other insurance</i>	<i>Yes, No</i>
<i>Life insurance</i>	<i>Yes, No</i>
<i>Agriculture insurance</i>	<i>Yes, No</i>
<i>Source of information</i>	<i>Health Staff, Media, Family /Friends / neighbour</i>

Data Analysis: Along with the descriptive statistic, the association between different variables has been tested using the chi square statistic.

Hypotheses

Following hypotheses are formulated and tested with the help of chi square statistic.

H₀₁: There is no association between the demographic variables and perception of the respondents towards the equal amount of premium.

H₀₂: There is no association between the income level and perception of the respondents towards the equal amount of premium.

H₀₃: There is no association between the purchase of other insurance policies and perception of the respondents towards the equal amount of premium.

H₀₄: There is no association between the health-related training and perception of the respondents towards the equal amount of premium.

H₀₅: There is no association between the source of information and perception of the respondents towards the equal amount of premium.

RESULTS AND DISCUSION

Results

Table 3 presents the self-reported view of the appropriateness of premium costs for various economic classes in the Social Health Insurance, based on the socio-demographic characteristics of the respondents.

Table 3

Perception towards the existing premium among the different economic classes

Demographic, and socio-economic characteristics	Total	Perception on suitability of same premium in different income class		p-value
		Justice n=164 (45%)	No Justice n=196 (55%)	
Gender				
Male	179	99(55.3)	99(55.3)	0.744
Female	181	97(53.6)	97(53.6)	
Age group				
Up to 25 Years	53	20(37.7)	33(62.3)	0.259
26 to 35 years	128	62(48.4)	66(51.6)	
36 to 45 years	96	49(51.0)	47(49.0)	
Above 45 years	83	33(39.8)	50(60.2)	
Education				
Literate and less	119	65(54.6)	54(45.4)	0.004
SLC	98	33(33.7)	65(66.3)	
Plus two or PCL	87	46(52.9)	41(47.1)	
Bachelors and above	56	20(35.7)	36(64.3)	
Profession				
Agriculture	84	46(54.8)	38(45.2)	0.002
Job	129	44(34.1)	85(65.9)	
Business	105	58(55.2)	47(44.8)	
Retired/others	42	16(38.1)	26(61.9)	
Caste/ethnicity				
Janajati	103	54(52.4)	49(47.6)	0.253
Dalit	47	20(42.6)	27(57.4)	
Brahmin Chhetri/others	210	90(42.9)	120(57.1)	
Annual Income (quintiles)				
Q1	58	30(51.7)	28(48.3)	0.035
Q2	62	15(24.2)	47(75.8)	
Q3	56	25(44.6)	31(55.4)	
Q4	74	30(40.5)	44(59.5)	
Q5	50	21(42.0)	29(58.0)	

Source: Field Survey, 2018

Figure in parenthesis indicates in percentage

Among the 360 participants surveyed, it was found that 45 per cent expressed agreement while 55 per cent expressed disagreement on the current premium rate. The results show that 55.3 per cent of male and 53.6 per cent of female disagree that the same premium for SHI for people with unequal distribution of income is fair. Based on their age, opinion shows that 62.3 per cent of people with age below 25 years think that the current system of similar premium is unfair. Similarly, majority of the graduate and SLC passed respondents opine that equal premium is not fair while 65.9 per cent of respondents with jobs agree that the premium should be based on the family income.

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Among the *Dalit* respondents, 57.4 per cent agree that an equal premium for families with different income is not fair. Based on the family's income, there are five groups called "quantiles." Most of the people having income level from second through fifth quantiles (Q2 to Q5) disagree with the current premium. However, 55.2 per cent of businessmen and 54.8 per cent of farmers agree that the current method of premium is fair. People in the first quantile agree on that the premium is justifiable. Results show that 51 per cent respondents having age between 36 and 45, 54.6 per cent respondents who are just literate, and Janajati (52.4%) agree on that SHI premium is fair.

Among the six different groups of respondents, the chi square analysis shows that education ($p=0.004$), profession ($p=0.002$), and annual income in quintiles ($p=0.035$) exhibit statistically significant association with the perception of respondents. Conversely, gender ($p=0.744$), age group ($p=0.259$), and caste and ethnicity ($p=0.253$) do not demonstrate a significant association with the perception of respondents. The findings indicate perception of individuals is mostly influenced by criteria such as income level, education and profession. Table 4 presents self-reported perception on appropriateness of equal premium for various economic class in Social Health Insurance, as influenced by insurance policy related factors.

Table 4

Perceptions among the respondent's insurance policy, knowledge, source of information

Socio-demographic Characteristics	Total (N)	Perception on suitability of same premium in different income class		p-value	
		Suitable	Not Suitable		
		n=164 (46%)	n=196 (54%)		
Health related Training	Yes	35	19(54.3)	16(45.7)	0.275
	No	325	145(44.6)	180(55.4)	
Life insurance policy	Yes	80	35(43.8)	45(56.3)	0.713
	No	280	129(46.1)	151(53.9)	
Auto insurance policy	Yes	139	73(52.5)	66(47.5)	0.035
	No	221	91(41.2)	130(58.8)	
Agriculture insurance policy	Yes	7	4(57.1)	3(42.9)	0.534
	No	353	160(45.3)	193(54.7)	
Commercial health insurance	Yes	17	8(47.1)	9(52.9)	0.899
	No	343	156(45.5)	187(54.5)	
Other insurance policy	Yes	35	20(57.1)	15(42.9)	0.147
	No	325	144(44.3)	181(55.7)	
Source of information about SHI	Health Staffs	100	48(48.0)	52(52.0)	0.0004
	Media	190	99(52.1)	91(47.9)	
	Family/Friends/neighbour	69	17(24.6)	52(75.4)	
Knowledge about SHI in Kaski	Yes	310	144(46.5)	166(53.5)	0.395
	No	50	20(40.0)	30(60.0)	

Source: Field Survey, 2018

Out of 360 respondents, 54 per cent disagreed on equal social health insurance premium for different economic classes. Most health, life, auto, agriculture, commercial, and other insurance non-holders believed that equal premium were unsuitable for different economic classes. Majority of respondents who were aware on SHIP in Kaski district through health staff, family, and friends and those who knew and did not know about the implementation of SHI in Kaski said the same premium rate is not justified.

However, most health-related training recipients, respondents without life insurance, auto insurance, agriculture insurance, or other insurance agree that equal premium for all families are appropriate. Similar type of opinion put forth by the respondents who were informed about SHI through media.

Among the eight different groups of respondents, *p* value of chi square shows that auto insurance policy ($p=0.035$) and source of information about SHI ($p=0.0004$) have the significant association with the opinion of respondents. On the other hand, health related training ($p = 0.275$), life insurance policy ($p = 0.713$), agriculture insurance policy ($p = 0.534$) commercial health insurance ($p = 0.899$), other insurance policy ($p = 0.147$), and knowledge about SHI among respondents in Kaski district ($p = 0.395$) do not show a significant association with the opinion of the respondents.

Discussion

Globally, the gap between the richest and poorest has reached extreme level, and is growing rapidly. The richest one per cent of people in the world now have more wealth than the rest of humanity, and in 2017 they received 82 per cent of the global increase in wealth. In the same year, the poorest half of the world's population did not grow at all (Oxfam, 2019). Inequality of wealth is also substantial in Nepal, and the wealth Gini is significantly higher than the income Gini at 0.74 (per capita), underlining how money is trickling upwards over time. The richest 10 per cent of Nepal's population have more than 26 times as much wealth of the poorest 40 per cent.

Economic inequality is the situation of unequal distribution of income and opportunity between different groups in society (Cutler and Johnson, 2004). The concept of social health insurance emerged during 1880s in Germany (Immergut, 1992) which spread almost all countries over the period. Social health insurance is adopted by majority of the countries in the world (Buttice, 2019).

Poverty and illness are nearly inseparable (Kristenson et al., 2004). The poorer the socio-economic status, the worse prospects for health development (Rose and Hatzenbuehler, 2009). Poor living and working conditions impair health and shorten lives (Krieger et al., 1997). Recent research suggests that health may also be affected by the distribution of income within society (Ichiro and Kennedy, 1999). The relationship between health coverage and income inequality is reciprocal (Hoffmann et al., 2018). If economic disparity in the country increases, the access to health services of population decreases. A similar pattern of result is obtained by a study in Nepal that people are willing to pay three times higher than existing premium if there is quality health service (Acharya et al. 2018) which indicates that people are ready to pay for the SHI as they have sufficient income for quality health services. Those who are marginalized and deprived, economically poor should be fully supported by state (Ranabhat et al, 2019).

The opinions of respondents reveal that until disparity in income exists, cost of health insurance (health cost) has to be charged according to their income status. Ultimately, inequality in health care brings inefficiency in the health sector. The conclusion of this study is similar to the findings of the various studies like Alvarez and El-Sayed (2017), Biggs et al. (2010), De Vogli et al. (2005), Wilkinson and Pickett (2008), and Kondo et al. (2009). Due to the inefficiency of the HIB, the coverage of the population is also not found satisfactory and

the renewal rate is also not impressive (Ranabhat et al., 2020 and Sharma et al, 2021). The study raised an issue of equity in the health sector which is directly associated with the income and assets of the health service users. Majority of the respondents do not agree with the current premium as it is not economically justifiable. Similar conclusion was drawn by Acharya et al (2019) and stated that healthcare system needs to reform since it could not reduce the gap of health-related disparities created by socio-political and economic system.

The issue raised by the study is strongly supported by Bhusal et al. (2021). The chi square test examined the association between the opinion of respondents on equal premium charged and their level of education, profession, and income level and found the association significant. Similarly, different types of life and nonlife insurance policyholders' view towards the amount of premium charged for the health insurance program has been found significant.

CONCLUSIONS

The survey examines potential SHIP members' opinions on the existing premium rate. The study received mixed opinions from respondents. Most respondents believe equal premium to different economic classes of people is not justified. The association between respondents' opinion and their level of education, their occupation, and income level has been found significant. Similarly, health related training and knowledge of SHI also influence the opinion on towards the existing equal premium structure different economic classes of people.

Health Insurance Board needs to review the existing rate of premium and redesign considering the affordability of the policyholders. Since majority of respondents suggested applying the different rate of premium among the different economic class of people, Health Insurance Board need to rethink the suggestions. Government of Nepal, being an ultimate agency to approve the premium rate, should consider the views of potential members of the SHIP. Theoretically, it is easy to take the decision to charge of the different premium based on the economic capacity of the family, however it is not easy task to identify economic status of the particular family and differentiate each family into the particular economic class.

Managerial Implication

The objective of universal health coverage is to provide the quality health service in the affordable cost to all population. People enrol in health insurance program only if the health cost is affordable otherwise the scheme does not attract economically poor segment of the population, this study explores the view of the people about the existing SHIP premium structure to different classes of people. The existing challenges of SHIP are low enrolment rate and high dropout rate that may be addressed by lowering the existing premium rate to poor. The conclusion of the study is existing premium structure need to be revised based on economic status of family. If the premium structure is revised as per the suggestion, there is the possibility of increase the new enrolment and decrease the drop out of existing members. Income based premium provides justice to health services users and it supports to redistribution of income and wealth through the health insurance mechanism which will be instrumental to achieve the goal of "universal health coverage".

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DECLARATION

There is no conflict of interest of authors to the study.

AUTHOR CONTRIBUTION

RG contributed on conception or design of the work, data collection, data analysis and interpretation, drafting the article, final approval of the version to be published. JKS and DA contributed to the design of the work, data analysis and interpretation, drafting the article, final approval of the version to be published.

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