論 文 の 内 容 の 要 旨

論文題目　Catastrophic out-of-pocket expenses for inpatient care among beneficiaries of the National Health Insurance Program in the Philippines
（フィリピン国民健康保険加入者における入院費の高額自己負担に関する研究）

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Background

Out-of-pocket payments for health care—payments made by the patients themselves directly for health care services at the time of utilization—can cause severe financial hardship or impoverishment. Each year, around 150 million people in the world suffer financial catastrophe, or disruption to their living standards, and 100 million are pushed below the poverty line because of paying for health care services. Fear of incurring a significant financial burden for health care can also discourage people from seeking health care. It has been estimated that many of the world's 1.3 billion poor people who live on less than US$ 1 a day have no access to health care because it is not affordable for them.

Catastrophic out-of-pocket payment for health care, however, is not always synonymous with high health care costs. Sizeable hospitalization treatment costs might not cause severe financial problems if they are paid fully or partially by prepayment and risk-pooling mechanisms: i.e. the mechanism where people pay before they are sick, then draw on the pooled funds when they fall ill. This includes social health insurance and tax-based funding, where the financial risk of health care expenditure is spread across the population.

Many developing countries have attempted to introduce social health insurance with the desire to mobilize more funds for health. In response to the growing awareness of social health insurance especially among developing countries, in 2005 the 58th World Health Assembly adopted a resolution urging member states of the World Health Organization to establish prepayment and pooling mechanisms for health care financing, especially social health insurance, in order to move toward universal health coverage, so that all individuals are guaranteed access to necessary health services without the risk of experiencing potentially severe financial consequences.

In recent years many low- and middle-income countries have made significant progress in developing prepayment methods for health care financing using social health insurance or tax-based funding or a mixture of the two. However, out-of-pocket payments continue to be the principal means of financing health care in many developing countries.

The Philippines is a lower-middle-income country in Southeast Asia whose population numbered 89 million in 2007. Like other developing countries, it is heavily reliant on out-of-pocket payments to cover health care costs. In 2007, 54% of total health care expenditure in the Philippines came in the form of out-of-pocket payments, while only 9% was from social health insurance, 26% from national and local governments and the remaining 11% from other private sources. A previous study estimated that 3.5% of the total population (approximately 2.7 million people) made payments for health care that could be considered as catastrophic in 2003.

Despite a high reliance on out-of-pocket payment among the population, the Philippines has a relatively long history of social health insurance. The Philippines' National Health Insurance Program (NHIP) started in 1969. At that time although the NHIP (then named the Medicare program) was successful in terms of providing coverage for employees in the formal sector, it was far less successful as regards reaching out to the poor and people working in the informal sector of the economy.

Against this background, the National Health Insurance Act was enacted into law in 1995. This Act clearly set its objective as achieving universal health care coverage among the population by providing health insurance coverage for all Filipinos of all income classes including poor indigents and informal workers. The Philippine Health Insurance Corporation (PhilHealth) was created to manage the NHIP. As of 2008, 53% of the population was estimated to be covered by the NHIP.

NHIP provides insurance benefits primarily for inpatient care. Basically, NHIP reimburses the cost of care on a fee-for-service basis—i.e. a health care cost payment scheme where the health care provider is paid an amount based on the services it renders—up to specified benefit ceilings which are decided based on the severity of the disease (what PhilHealth calls 'case type') and the classification (level) of hospitals. Thus, the more severe the disease and the higher the level of hospital used, the higher the benefit ceiling.

Although NHIP beneficiaries are entitled to these insurance benefits, they are still not completely free from the risk of financial catastrophe when receiving treatment. This is primarily because of the benefit ceilings. Under the benefit scheme described above, patients do not have to make any out-of-pocket payments for medical care when hospital charges and doctor's fees are less than the benefit ceilings. When a charge is higher than the benefit ceiling, however, NHIP reimburses the cost only up to the benefit ceiling. Patients have to shoulder the excess cost incurred themselves in the form of an out-of-pocket payment and there is no limit in terms of the maximum amount that should be paid out-of-pocket. NHIP covered only 34% of the total inpatient care costs on average in 2008.

Objectives

This study aimed to quantify the extent to which the NHIP insurance scheme is protecting its beneficiaries from having to make catastrophic payments when they experienced inpatient care. Specifically, the following three questions were examined: (i) what is the prevalence of catastrophic payment among NHIP beneficiaries who received inpatient care; (ii) how far does NHIP reduce the prevalence of catastrophic payment among NHIP beneficiaries who received inpatient care; and (iii) which characteristics of patients, households, diseases, and hospitals are related to the likelihood of having to make a catastrophic payment.

Methods

Four different data sources were used to examine the above stated research objectives of this study: NHIP claim forms submitted to hospitals, hospital accounts statements, a questionnaire interview and the NHIP claim record database.

First, households with NHIP inpatients in Baguio City (an urbanized commercial center) and Benguet Province (a rural province centered around agriculture)—both in the Cordillera Administrative Region in northern Luzon—who were discharged from 14 hospitals in the same area during November 2010 were identified from NHIP claim forms submitted to the hospitals. Information on patients, diseases, hospital charges, provisional NHIP benefit deduction and out-of-pocket payments to the hospitals was also collected from the claim forms and hospital accounts statements.

Second, a questionnaire interview was conducted among 1,200 randomly-selected households to collect information on household annual consumption and other measures of socioeconomic status as well as on health care expenditure in the previous 12 months.

Third, information on the final value of NHIP benefits was obtained from the NHIP claim record database. Data from these four sources were merged per household and per hospitalization.

Households were considered as having made a catastrophic payment when out-of-pocket expenses for inpatient care exceeded 40% of 'capacity-to-pay', i.e. annual consumption net of subsistence needs on food. A multivariate logistic regression analysis was carried out to assess which patient, disease, household and hospital characteristics were associated with making a catastrophic payment.

Findings

Out of 1,200 selected households, 1,044 households with 1,624 hospitalizations were included in the analysis (response rate: 87%). The mean number of family members per household was 5.2 persons. The mean age of the household members was 27.8 years old, where 31% of all household members belonged to 0-14 age group, 62% to the 15-59 age group, while 6% were aged 60 years old and above.

The mean and median values of annual household consumption of the 1,044 participating households were

349,742 Philippine pesos (PHP) (US$ 7,753) and PHP 285,229 (US$ 6,323), respectively. The mean and median values of annual household capacity-to-pay were PHP 249,508 (US$ 5,531) and PHP 177,465 (US$ 3,934), respectively.

Among the 1,044 households, the mean and median values of annual out-of-pocket health care expenditure (including inpatient, outpatient and self care) were PHP 44,864 (US$ 995) and PHP 24,123 (US$ 535), respectively. On average, 56% (PHP 25,339 or US$ 562) of total out-of-pocket health care expenditure was for inpatient care, 31% (PHP 13,969 or US$ 310) of the total was for outpatient care, and 12% (PHP 5,556 or US$ 123) of the total was for self-health care.

Among 1,624 hospitalizations from the 1,044 households, 28% of patients were children (less than 15 years of age), 52% were of working age (15-59 years of age) and 20% of patients were senior citizens (60 years of age and above). The median value of the length of hospitalization (per single hospitalization) was three days. Out of the 1,044 households, 70% had one hospitalization between December 2009 and November 2010 (12 months), 18% had two hospitalizations, and 12% had three or more hospitalizations.

Around 61% of patients had diseases classified as case type A (simple diseases), 27% had case type B (diseases of moderate severity), 6% had case type C (severe diseases) and only 1% of patients had case type D (extremely severe diseases), while the case type was unknown for 5% of patients. The majority of patients (81%) were hospitalized in tertiary hospitals (37% public and 44% private), while 6% were in primary hospitals and 14% in secondary hospitals. In terms of the ownership of hospitals (government or private), 44% of patients went to government hospitals.

The mean value of total costs for inpatient care per hospitalization was PHP 28,962 (US$ 642), while the median value was PHP 17,150 (US$ 380). On average, 85% (PHP 24,677 or US$ 547) of the total cost was for the hospital and doctors, while the remaining 15% (PHP 4,286 or US$ 95) was for drugs and medical supplies bought outside the admitting hospital which were not claimed to PhilHealth, and the costs arising for transportation and family attendants.

These costs were paid by four sources: PhilHealth benefits, out-of-pocket payments, other health insurance schemes, and social welfare discounts. On average, 35% (PHP 10,117 or US$ 224) was paid by PhilHealth, 60% (PHP 17,295 or US$ 383) by out-of-pocket payments, and 5% (PHP 1,550 or US$ 34) by other health insurance schemes and social welfare discounts.

The overall prevalence of catastrophic payment for inpatient care was 8.3% (95% confidence interval [CI]: 6.7-10.0%). The prevalence would have been 17.5% (95% CI: 15.2-19.8%) if patients had paid all of the inpatient care costs without NHIP benefit deduction, other insurance benefit payments and social welfare discounts. As a result of NHIP benefit deduction alone the prevalence halved to 8.8% (95% CI: 7.1%-10.5%).

Despite their membership of the NHIP, households in the lower consumption quintiles, senior citizens, and individuals with severe diseases were all still likely to have a higher probability of making a catastrophic payment even after all other factors had been taken into consideration.

Conclusion

Even though the NHIP was effective in reducing the prevalence of catastrophic payment due to inpatient care, it is still a long way from providing universal health coverage, where all people can access necessary health services without the risk of experiencing potentially severe financial consequences. Being poor, a senior citizen and having a severe disease were all associated with making a catastrophic payment, even though the NHIP and other social welfare support mechanisms have tried to mitigate this phenomenon by providing free NHIP membership as well as social welfare discounts.

Under a health care provider payment scheme where health facilities have discretion to set their own fee schedules on a fee-for-service basis, the providers have less incentive to contain medical costs through increasing efficiency as they can charge all the cost to PhilHealth and its members. PhilHealth bears limited financial risk as a result of capping benefits with ceilings. Hence it is the patients themselves who bear the risk of having to pay a potentially large amount in terms of out-of-pocket expenses. PhilHealth has tried to reduce this figure by raising benefit ceilings, but it has not been successful, as it has been followed by increased fees of the health care providers.

In order to prevent catastrophic out-of-pocket payments among NHIP beneficiaries, not only are benefit increases needed, but cost-containment mechanisms also need to be introduced through shifting the provider payment method from fee-for-service payment to case-based payment, whereby health care providers are only allowed to charge a predetermined rate for each group of diagnoses. PhilHealth has started such a shift, whereby the top 23 diseases and conditions are covered using a predetermined fixed rate. However, balance billing is prohibited only when poor members of the sponsored program are admitted to public hospitals due to the above-mentioned fixed rate cases, and many NHIP inpatients including the poor are still at risk of incurring financial hardship. Further refinement of the payment methods is needed, including the expansion of case rates payment to other diagnoses and limiting balance billing to all NHIP beneficiaries.

For greater cost coverage per claim, more service coverage (e.g. outpatient care coverage) and more population coverage (especially for the poor), increased investment for health is required. With the dependency on out-of-pocket payment needing to be reduced, it is the government and PhilHealth who should invest in health more. To raise the share of government spending on health, establishing universal health coverage as a key political agenda is important. To increase funding from PhilHealth, the premium contribution needs to be raised. However careful consideration should be given to the progressivity and regressivity of the contribution, when it is increased.