Short Communication

Social Health Insurance: can we ever make a case for Pakistan?

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Abstract

Social Health Insurance has been used as an approach to increase efficiency of healthcare system and consumer satisfaction in provision of healthcare services. Many developed countries have successfully planned and implemented insurance models which provide almost universal coverage and addresses issues of equity. The phenomenon is established however, developing countries especially Eastern Mediterranean region is still struggling to present one successful model of social health insurance which can be compared with European or Scandinavian countries. Pakistan likewise faces huge challenges in public sector healthcare provision and considerable proportion of population prefers to go to private sector. Quality of care, access and rising costs make healthcare, somehow, a luxury. Rising national economy, political will to carry out health sector reforms and the creation of district health system after devolution presents an opportunity to launch at least some pilot initiatives of social health insurance. This will give us some food for thought to further up scale and replicate the model all over the country.

Introduction

Health insurance is an approach of paying for some or all of the costs of healthcare. It protects insured persons from paying high treatment costs during an episode of sickness. The basic health insurance process is that a consumer makes a regular payment to a managing institution (Figure 1). This institution is responsible for holding the payments in a fund and paying a healthcare provider for the cost of the consumer's care. The history of Social Health Insurance (SHI) is as old as the history of mankind. One of the first countries which institute SHI nationally was Germany in 1883. Since then the concept of social health insurance reached throughout the world. Currently, according to World Bank, the system is practiced in more than 60 countries all over the world. Some key features of SHI could comprise legislation by government; regular and compulsory contributions by users; no possibility for eligible members to opt out of a scheme; premiums calculated according to ability to pay; standardized benefit packages; and contributions earmarked for spending on health services. Various theories in health insurance are quoted on decision-making on insurance enrolment. These are expected utility theory (insurance demand is a choice between an uncertain loss), state-dependent utility theory (consumer's utility levels and tastes are influenced by their state) and endowment effect (decision-making is affected by individual's risk aversion about something new). While presenting any framework of SHI, it is imperative to consider these theories for alleviating any risk of failure.

Literature Review

This paper presents an overview of social health insurance models functional in various developed and developing countries. The scope is to analyze the prospects of having a universal social health insurance in Pakistan which is currently being tried and tested in segments of the country; with or without government's legislation. Literature references include case studies from various countries, articles searched through Medline/PubMed, official documents of World Bank, OECD, Asian Development Bank and World Health Organization.

How countries handle risk adjustments

Many European states embarked on healthcare reforms including those introducing SHI for increasing efficiency and consumer satisfaction in provision of health care services. All these countries have risk adjustments options (the money paid by the members on the basis of risk, illness etc) but apply it differently. For instance, the
mechanism of risk adjustment is most advanced in the Netherlands; neither Germany nor Switzerland use morbidity-based adjusters for risk adjustment. In Germany, risk adjustment is based on age, sex, entitlement for disability pensions, and entitlement for sick pay, income, and registration in a certified disease management programme. Risk adjustment in Switzerland is only based on sex and age. Therefore, incentives for risk selection of sickness funds are large. The Netherlands is the only country that applies a combination of outlier risk-sharing and proportional risk sharing to prevent selection. Similar to risk adjustment, the competition is high for consumer choice in all these countries. Germany has charged according to the income. In contrast, Netherlands has free choice of consumers, and depend on sickness fund. Switzerland has two fold system for sickness; first enrolling every one, and secondly, free choice for consumers was also considered to increase the pressure on sickness funds.

The model of payments

The problem faced by many countries is the type of payer (single or multiple payer) in the health insurance system. An interesting study compares single-payer and multi-payer models in the areas of revenue collection, risk pooling, purchasing, and social solidarity. Both single and multi-payer systems have advantages, which may meet countries' priorities for their health insurance system.6 Difference between single and multi-payer system has been introduced through revenue collection, efficiency, aggregate amount of revenues raised, and equity. Single-payer system is considered as an advantage over multi-payer systems in the efficiency of collecting revenues, overall cost control, and the capacity to subsidize health care for low-income individuals. Single-payer systems are usually financed more progressively and rely on existing taxation systems, by which governments seize high degree of control over the total expenditure on health. One study in Japan discloses to what extent the employees bear the cost of employers' contribution on top of their own contribution.7 According to this study, burden of social insurance shared by employers raises labour costs, shifting further the product price, reduction in employment, or shifting backward to the employees through reduction of salaries. Therefore, the extent of the incidence of employers' contributions to social security in the form of reduced salaries depends not only on the elasticity of labour supply/demand, but also on how employees value the contribution relative to social security benefits they are offered.

SHI in high-income countries

Most of the developed countries took decades to have SHI implemented. Some of high-income countries which have successful SHI include Germany, France, Belgium, Japan, Korea and Switzerland. It is interesting to note that health insurance in many of these countries started when these were classified as lower-middle income countries. Germany was the first to do this through legislation, by which workers earning less than a specific amount were enrolled in the sickness fund program of SHI and France followed the same in year 2000.2 In Germany, SHI is based on solidarity (mandatory health insurance for everyone within an income under specific amount) and subsidiary (the government provide only necessary framework of laws and regulations). More than 88% of the population has mandatory insurance by the statutory health insurance funds; 11% have a private insurance policy or are civil servants who get their sickness costs reimbursed from their employers.8 In Japan, the system of health insurance is currently financed through individual contributions, employer contributions, and government subsidies. This system accounted for 84% of all health expenditures in fiscal year 1996. Japan has three categories of health insurance: employer-based insurance, national health insurance and health insurance for the elderly. The former two categories cover the total population.9 In Belgium, since 1944 health insurance is compulsory and adopted for all salaried workers. The mechanism is based on National Fund for Sickness and Invalidity, in which the funds are collected and distributed to the mutual health funds that are in charge of administering compulsory health insurance. Self employed are also covered but for major health risks only. However, civil servants, the physically disabled, and the mentally handicapped remain uninsured in the country.6 Similarly, in Korea, these groups remain uncovered by SHI model implemented in July 2000. The system gets financial contribution from insured and their employers and through government subsidies.10

SHI in low and middle-income countries

Despite being institutionalized in many parts of the world, SHI is still a dream in most of the developing countries where poverty restrains access to quality healthcare. The statutory healthcare system in many of these countries covers only employees and their families. The burden is high for majority of people who remained uninsured; self employed, unemployed, elderly and women. SHI is prospective financing where funds are allocated in advance in the form of premium, paid by the insured people or households. Major concern regarding SHI is its deficient approach to finance healthcare for the most vulnerable groups in a society. In many developed countries (France and Belgium) government tend to provide coverage through SH whereas in many developing countries (Mexico, Peru) poor are excluded from SHI system. Now the question
Table 1. Distinctive features of SHI models in developed countries reflecting levels of equity.

<table>
<thead>
<tr>
<th>Features</th>
<th>Germany</th>
<th>Japan</th>
<th>Belgium</th>
<th>Korea</th>
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<tbody>
<tr>
<td>Nature of SHI</td>
<td>SHI is based on solidarity</td>
<td>No choices among funds</td>
<td>SHI is based on National Fund for sickness</td>
<td>Based on government subsidies</td>
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<tr>
<td>Costing Mechanism</td>
<td>Difference in cost sharing</td>
<td>Difference in cost sharing</td>
<td>Difference in cost sharing</td>
<td>Difference in cost sharing</td>
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<tr>
<td>Financial contribution</td>
<td>SHI is based on government subsidies</td>
<td>SHI financed through individual contribution, and government subsidies</td>
<td>Self employed covered but for major health risks only</td>
<td>Finance through insured, their employees and government subsidies</td>
</tr>
<tr>
<td>Population coverage</td>
<td>Covers disabled and elderly</td>
<td>Doesn't cover disabled and elderly</td>
<td>Doesn't cover disabled and elderly</td>
<td>Doesn't cover disabled and elderly</td>
</tr>
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arises "is the system in which poor are excluded can provide equitable social health insurance?. The only financing mechanism left for these groups is out-of-pocket payment, which yet again push them towards poverty. This type of health care financing raises a lot of questions towards equity. The remedy chosen by some middle-income countries is highly appreciated around the world. For example, in Thailand, low income card is being issued since 1981 for the households below a defined poverty line. Moreover, Thai government has introduced '30 Baht Scheme' since 2001, through which the government is trying to get universal coverage of health care. Due to this scheme, all Thai people have an equal right to access the quality health services. Likewise, National Health Insurance had been introduced in South Africa in late 1980's, later in mid 90's it converted into Social Health Insurance. As a result, three tiers developed; tax-funded services for the poor, SHI-funded services for low-and middle-income workers and their families, and the private sector serving the rich.

Social Health Insurance in Pakistan: prospects

Public health expenditure is meager in Pakistan (3.5% of the public budget is spent on health, and public health expenditure is 0.7% of GDP). National public expenditure on health is $4 per capita, while total expenditure on health is $18 per capita. This reflects the high share of private health care spending, including by households, which accounts for 75.6% of health care expenditure. Social health insurance covers only 5% of the population but represents about 40% of federal and provincial governments spending on health.

Like many other developing countries, SHI is at the preliminary phase in Pakistan; in some provinces it is being experimented; while in other provinces there is no planning at all. Many international donors have shown interest in providing or helping provincial governments to give assistance in this regard. Although SHI is just one component of social protection strategy, if appropriately structured, it can eliminate many equity issues in healthcare provision across the country. With the help of World Bank, DFID and ADB, the provincial governments of Punjab and NWFP have been trying to introduce SHI in Pakistan. The social security system is restricted to civil servants, armed forces, police and formal sector enterprises (with five or more employees). This hardly covers 3% of the total employed labour forces. Currently in the country, numbers of experiments are underway. Some of private health insurance initiatives are as follows:

1. Allianz EFU Health Insurance for groups and individual began health insurance with the pilot project of 100 family physicians. It allows on average 6 visits per year per person for primary care. The assessment shows that private insurance currently covers a very small number of people.

2. Adamjee insurance company assess that smaller companies (300-400 employees) opt for health Insurance through Insurance companies. Larger companies tend to self-insure or provide their own healthcare facilities such as in Pakistan International Airline, which runs excellent facilities for its employees. Adamjee covers 30,000 people in Karachi and 150,000 throughout Pakistan.

3. Haripur Reproductive Health Project (Save the Children/USA) has a model project "community-service provider partnership" in which communities and service providers identify needs and opportunities, and implement interventions to improve reproductive health awareness, services and outcomes.

None of these models exhibit health insurance conceptual framework in its entirety. Therefore, it can be suggested that if there is an integrated approach not only among these private enterprises but also with the government, these schemes can be scaled up to the level of sustainability. In addition, there are some issues related to SHI, which can be faced by any country while implementing health insurance. This must be taken into account while designing a plan: per capita income, structure of economy (size of formal and informal sector), the urban/rural distribution of population, design of social health insurance (multiple or single, voluntary or compulsory) and target group (old age, employees, self employees). All these aspects if not addressed adequately issues can create inequalities across the
population in SHI, which may make this system more complicated rather than helpful.

**Conclusion**

Given present human resource constraints and institutional capacities, operationalizing any government funded SHI scheme on a national level ensuring universal coverage is a huge challenge. Positive vibes are a rising national economy, political will to carry out health sector reforms and the creation of district health system after devolution. The current scenario is ideal to pilot small initiatives, may be at district levels, and then up scale by learning lessons from these pilot projects. Policy makers, health systems specialists and other stakeholders must capitalize on these opportunities and windows to find a way out.

**References**


**Case Report**

**Cardiac Tamponade after removal of temporary pace maker in multidisciplinary Intensive Care Unit**

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**Abstract**

Cardiac tamponade is a medical and surgical emergency, which needs early recognition and treatment. Myocardial perforation leading to cardiac tamponade is a rare complication after pace maker insertion. We are reporting a case of cardiac tamponade after removal of temporary pace maker in a multidisciplinary intensive care unit.

**Introduction**

Cardiac tamponade is a medical emergency which is characterized by the accumulation of fluid in the pericardial space, resulting in reduced ventricular filling and subsequent haemodynamic compromise. Myocardial perforation leading to cardiac tamponade is a rare complication after pace maker insertion. This condition requires urgent recognition since the prompt drainage of the pericardial fluid may be lifesaving. We present a case report of myocardial perforation complicated by cardiac tamponade after removal of a pacemaker which was successfully managed surgically.

**Case Report**

A 60 year-old female with hypertension, diabetes mellitus and ischaemic heart disease with mild to moderate systolic dysfunction, was admitted through emergency room with cardiogenic shock due to Non-ST elevated MI (Troponin I >3), hyponatraemia (Na = 123 Meq/L) and severe metabolic acidosis. She was intubated in emergency room due to respiratory distress. Post intubation, she went into cardiac arrest. Temporary pacemaker was inserted in the emergency room (Figure) and she was transferred to intensive care unit (ICU). She was successfully extubated on day 4. Patient regained her own heart rhythm 24 hours after insertion of pacemaker as shock and metabolic acidosis improved. Within one hour of removal of pacemaker she complained of dizziness and difficulty in breathing. Blood pressure was 60/40 mmHg and heart rate...