Financing mechanisms applied for successful universal health coverage in Malaysia, Thailand and Singapore - Lessons for Pakistan

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Abstract

Universal health coverage is a global agenda and, currently for Pakistan, achieving this goal is a challenge because of a number of constraints. The current narrative review was planned to describe an overview of the provision of health insurance in Malaysia, Thailand and Singapore that have achieved universal health coverage, and to propose a roadmap for Pakistan. Literature search was conducted on Google Scholar and PubMed databases as well as on the World Bank website to retrieve relevant articles. The three studied countries achieved universal health coverage by gradually increasing allocation for health and through various mechanisms, such as health insurance schemes which covered different segments of the population, and partnerships with private-sector care-providers. Pakistan needs to prioritise health in policy agenda because health insurance is negligible in Pakistan. Additionally, Pakistan also needs to efficiently utilise partnerships with the private sector to further increase healthcare coverage.

Keywords: Healthcare financing, Health insurance, Universal health coverage, UHC, Pakistan.

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Introduction

Globally, countries are committed to achieving universal health coverage (UHC) “by providing quality healthcare to all people when needed regardless of ability to pay”. Healthcare financing plays an important role in achieving UHC.1 UHC is based on the notion of health as a basic human right and “Health for All” goal was set at Alma Ata in 1978.2 The third Sustainable Development Goal (SDG-3) is related to UHC “including financial risk protection, access to quality essential healthcare services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all”.3 SDG-1, about ending poverty, is also at risk of failure in the absence of UHC. While this is difficult to achieve at once, experiences from various countries suggested that a number of health financing reforms are needed for expanding healthcare coverage for the whole population. In China, three distinctive social health insurance schemes were implemented through the funds generated from the country/municipal grounds and resulted in nearly 300 or more health insurance plans with good benefit packages for the urban employees.4 Rwanda has implemented the same methodology, even at a low-salary level.5 Indeed, various nations, like Rwanda, China, Thailand, Singapore, Vietnam and others, would not have achieved coverage of more than 80% population under medical insurance schemes in such a short time without investing in social protection.6 Health financing is mostly carried through multiple model-based approaches; depending on the country’s dynamics and stewardship role, there are different models which are being applied, such as the Bismarck Model, the Beveridge Model and the Residual Model.7

Pakistan’s demographic and health profile and current health financing system: The total population of Pakistan in 2017 stood at 207,774,520,8 which makes it the sixth most populous country in the world. Currently, Pakistan is spending less than 0.53% of its gross domestic product (GDP) on health and 2.6% including the private sector.9 The finances for healthcare are contributed by out-of-pocket payments, government incomes, industries, private insurance, external fund to non-governmental organisations (NGOs) and global financing. According to World Bank, the out-of-pocket expenditure of Pakistan was 65.23% in 2016.10 General taxation is the major source for public financing for health. Foreign aid constitutes only 2% of the total financing and is mainly allocated for specific health programmes. The social insurance system is limited to civil servants, armed forces, police and formal-sector employees which make up only 3% of the total population.11 The government initiated a pilot project, named the Health Suhulat Card, which is a pilot project for advancing public health in the country with the objective to ensure UHC through primary healthcare whereas it also covers secondary and tertiary healthcare services. Under this programme, people below the poverty line will be able to get healthcare services free of charge up to Pak rupees (PKR) 699,075 ($4521.92; 2019) per year in both public and selected private healthcare facilities.8 According to this scheme, both surgical and medical services can be availed, such as cardiac surgery, chemotherapy, radiotherapy, dialysis, maternity and others.12

NARRATIVE REVIEW

Financing mechanisms applied for successful Universal Health Coverage in Malaysia, Thailand and Singapore - Lessons for Pakistan

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The current narrative review was planned to present a snapshot of the mechanisms of health insurance in Malaysia, Thailand and Singapore which have achieved UHC. In the current scenario of Pakistan health sector, achieving UHC is a challenge because of human resource constraints, lack of institutional capacities, poor operationalising and very low allocation of GDP for health. In 2011, health was devolved to the provinces to improve the performance and health of population, but no major reforms have taken place post-devolution to improve healthcare financing in Pakistan. The current narrative review is likely to help understand the social insurance programmes and financing in the above-mentioned three countries to achieve UHC.

**Methods**

The narrative review comprised literature search on Google Scholar and PubMed databases as well as on the World Bank website to retrieve relevant articles, health system policies and reports of the selected countries. Articles published in any language other than English were excluded. The following terms were used for the search: health insurance system OR social security OR UHC OR mode of financing AND payment mechanism OR reimbursement OR access to insurance OR solidarity OR healthcare costs OR revenue collection and UHC OR Malaysia OR Singapore OR Thailand. Consequently, the mode of financing adopted to achieve UHC and the organisation of health insurance systems in the three targetted countries were reviewed.

**Malaysia healthcare financing reforms to achieve UHC:**

Malaysia is one of the most populous countries in the Far East, and, according to 2016 census, the total population was 31,187,000, including the non-citizens. According to the World Health Organisation (WHO), the gross national income per capita (purchasing power parity [PPP international $2013]) was 22,460, and poverty headcount ratio was 0.4% of the total population. Total expenditure on health was 4.1% of GDP in 2016. Out-of-pocket expenditure contributes about 12% of total health expenditure and health expenditure per capita is close to 5% of the GDP. Out-of-pocket payment is below 36% and 100% of Malaysian population is covered by health insurance. Malaysia has applied a mixed financing model approach, namely the Beveridge and Bismarck model.

**Thailand healthcare financing reforms to achieve UHC:**

Total population of Thailand was estimated to be 68,863,514 in 2016. Life expectancy at birth was 74 years, and gross national income per capita (PPP international $2013) was 13,510. Total expenditure on health was 4.1% of GDP. OOP expenditure contributes about 12% of total health expenditure and health expenditure per capita is $217. Thailand acquired UHC status in 2012. Initially, three financial risk protection schemes were introduced which were the Civil Servant Medical Benefit Scheme (CSMBS) for government servants and their dependents, the Social Health Insurance (SHI) for private employees and the Universal Coverage Scheme (UCS) for the rest of the population not insured by any of these schemes (Table 2).

Table 1: Modes of financing in Malaysia to achieve universal health coverage (UHC).

<table>
<thead>
<tr>
<th>Healthcare insurance schemes</th>
<th>Year</th>
<th>Covered population</th>
<th>Financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Health Financing Scheme</td>
<td>1984</td>
<td>Individual</td>
<td>General taxation and Government</td>
</tr>
<tr>
<td>Private health insurance and voluntary and Social Security Organisation (SOCSO)</td>
<td>1997</td>
<td>General public and Work related injuries.</td>
<td>General taxation, Payments and SOCSO</td>
</tr>
</tbody>
</table>

Table 2: Modes of Financing in Thailand to achieve universal health coverage (UHC).

<table>
<thead>
<tr>
<th>Healthcare insurance schemes</th>
<th>Year</th>
<th>Covered population</th>
<th>Financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil servant medical benefit scheme (CSMBS)</td>
<td>1980</td>
<td>Government employee, pensioners, dependents</td>
<td>General tax by annual budget bill</td>
</tr>
<tr>
<td>Social Security Scheme (SSS)</td>
<td>1990-94</td>
<td>Non-Governmental employees</td>
<td>Payroll tax and tri-petite contribution 1.5% of salary (company, worker &amp; government)</td>
</tr>
<tr>
<td>USC</td>
<td>2002</td>
<td>Population who are not insured by SHI and CSMBS</td>
<td>General tax by annual budget bill</td>
</tr>
</tbody>
</table>

UHC: Universal Coverage Scheme, SHI: Social Health Insurance.

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Singapore’s healthcare financing reforms to achieve UHC: Singapore in 2014 had an estimated population of 5,622,000, with life expectancy at birth being 81 years. Gross national income per capita (PPP international $2013) was 76,850 and total expenditure on health as percentage of GDPI was 4.9, with OOP expenditure being 31.2%.²⁴ Singapore achieved UHC in 1993. Singapore has a unique model of healthcare financing for achieving better health outcomes at a low cost. The main strategy of its health financing system is a combination of personal responsibility with targeted financial assistances. After the separation from Malaysia in 1965, Singapore quickly progressed. Its GDP increased more than 300 times, from $704 million in 1960 to $247.7 billion in 2012.²⁵ Singapore used varying modes of financing, covered population and financial resources from 1984 to 2002 to achieve UHC. To achieve UHC, Singapore healthcare financing has gone through several phases of health coverage packages, like MEDISAVE, MEDISHIELD, MEDIFUND and ELDERSHIELD. In 1984, MEDISAVE, a compulsory medical savings account for families, but with limited outpatient services, was launched. In 1990 MEDISHIELD was initiated with high-cost health insurance, covering a wide range of services except chronic illnesses. Later, in 1998, a similar service package MEDIFUND was introduced to cover poor population with co-payments by government and low-cost insurance.²⁵ Furthermore, to cover the disabled and the elderly, ELDERSHIELD was set up in 2002.²⁶ Therefore, now about 93% of the population is covered under one or the other social protection scheme.¹⁸ Singapore has made continuous expansion of health insurance program and insurance schemes as per the need of populations.

Analysis of health sector reforms: It can be seen that UHC can be achieved with political commitment and strategic partnership with private sector. For example, Thailand gradually replaced private methods of financing with public financing measures by using general taxation. This resulted in increased health budget without financial hardships as Thailand has reduced its OOP payment by 22.4%; from 34.1% in 2000 to 11.7% in 2015. Similarly, GDP/capita is lower in Thailand ($6594) compared to Malaysia ($9945) and Singapore ($57714). Malaysia focussed on social health insurance schemes to single-pool funds, while Thailand and Singapore also used social insurance and multiple pooling systems for strengthening their health systems. These countries achieved UHC through increasing expenditure on health and introducing public and private insurance systems. The sources of financing to achieve UHC these countries adopted were general taxation systems and additional financing from insurance pooling, but political commitment and effective planning are the basic requirements to achieve sustainable health insurance system. These countries’ commitment towards population health, as indicated by increased spending on health, was a significant factor in achieving UHC.²⁷ However, the most important constraints of these reforms were equity-based distribution of healthcare benefits, rising healthcare costs, expansion of programme among the vulnerable population, spectrum of services and the pressure on public healthcare institutions.

Table 3: Modes of financing in Singapore to achieve universal health coverage (UHC).

<table>
<thead>
<tr>
<th>Healthcare insurance schemes</th>
<th>Year</th>
<th>Covered population</th>
<th>Financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDISAVE</td>
<td>1984</td>
<td>All employed</td>
<td>Income tax and Individual Financing</td>
</tr>
<tr>
<td>MEDISHIELD</td>
<td>1990</td>
<td>Age below 90</td>
<td>Insurance premiums payable through their MEDISAVE accounts</td>
</tr>
<tr>
<td>MEDIFUND</td>
<td>1993</td>
<td>Poor population</td>
<td>Government subsides fund</td>
</tr>
<tr>
<td>ELDERSHIELD</td>
<td>2002</td>
<td>Severe disabilities and elderly</td>
<td>Low cost insurance program</td>
</tr>
</tbody>
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Discussion
Malaysia, Thailand and Singapore achieved UHC through increasing expenditure on health and introducing public and private insurance systems. Overall GDP per capita is higher in these countries than Pakistan. These countries over time have increased health allocations. Sources of financing are general taxation systems and additional financing comes from insurance pooling. Similarly, many other countries, such as Brunei, Indonesia and Vietnam, have a comprehensive benefit package. For instance, in Brunei, insurance scheme covers both basic and tertiary care hospitals.²⁸ In Indonesia, consumers are given flexibility of choosing the insurance level based on care ratings²⁹ and in Vietnam, the SHI runs an inclusive package which covers a wide range of services, from ambulatory and hospital care to advance diagnostic and therapeutic services.³⁰

On the other hand, Pakistan is a low-income country with
a GDP per capita of $1548 in 2015 with low spending on health at 0.53% of GDP compared to the WHO cut-off of 4%. Additionally, major proportion of this spending, close to 60%, comes from OOP payments which further complicates the situation. Pakistan needs to go for health sector reforms to achieve UHC which is evidence-based and already adopted in many low- and middle-income countries (LMICs), such as Nigeria and India. There are many ways to collect revenue from health insurance, including private, social and community-based. Many nations have adopted new methods to UHC by applying public health financing reforms. In the light of the Constitution, the government has the responsibility for the provision of free healthcare, but in reality, the services are not available. There is overcrowding, low staffing and poor equipment in public-sector facilities. Pakistan can introduce a mixed health system that can help achieve UHC in a short timeframe. Adopting the Beveridge model, the existing infrastructure may be used with the focus on providing free-of-cost essential preventive and pre-emptive services. These services may include immunisation, maternal, neonatal child health and family planning services, health education campaigns and programmes for the prevention of communicable and non-communicable diseases and other community-oriented programmes. Curative services can be provided by using the Bismarck model, where these services can be purchased from private providers. Another option could be privatising large hospitals in the public sector. Among the 17 SDGs which Pakistan has pledged to achieve by 2030, SDG-3 relates to providing UHC to all citizens. It is an ambitious, but achievable target which needs major structural and organisational reforms in the health system. A number of other issues, such as low budgetary allocation, poor governance and poor information systems, pose further challenges on the road to UHC. With rapid population growth, the current health infrastructure in the public sector cannot overcome the poor coverage of healthcare services, as there will be a constant shortage of hospital beds, doctors, nurses, equipment and supplies. Asian countries, such as; Japan, South Korea, Chile and Taiwan and Thailand, have single revenue collection system which may not be a feasible option for Pakistan. A mixed funding mechanism can be implemented as an alternative. In this system not-for-profit insurance programmes, funded by payroll contribution or individual payments and government contributions for those who cannot afford, can be implemented. Many developing countries in Africa and southeast Asia with weaker public healthcare systems have implemented such mechanisms. Recently, Pakistan has implemented health insurance schemes for the poor to obtain medical care for certain conditions which can be availed from public and partner private hospitals. Through this system, those who can afford, make OOP payments to receive expedited services for non-urgent routine procedures. These payments can then be added in the pool to subsidise costs for other non-affording people.

According to the Thai Constitution, “all citizens have the right to equitable access to quality healthcare. The package of the UCS includes a comprehensive set of health interventions stipulated in a contract between the NHSO (National Health Security Office) and the providers, at every level of health service. It covers two components: the health promotion and disease prevention package, and the treatment and care package”.

Currently the public sector in Pakistan provides free services for primary healthcare which includes maternal and children health services, like antenatal, family planning, immunisation, growth monitoring etc. Treatment of common illnesses is also provided through primary health care (PHC). Vertical programmes, including the Expanded Programme on Immunisation (EPI), Tuberculosis (TB) Control Programme, Family Planning and Primary Healthcare (FP&PHC), Malaria Control Programme, Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) Control Programme, are also integrated with the PHC to improve the coverage and efficiency. However, these still have not achieved a high coverage.

Horizontal health system can also include insurance to cover secondary and tertiary care through economical health insurance packages and collaboration with the private sector to ensure wide coverage and quality of care. The existing provincial healthcare commissions of Pakistan should be empowered to enforce standards and regulate costs of care to provide a uniform care to all the people regardless of their socio-economic status. Furthermore, the copayment and community pooling financial schemes can also help to improve coverage of the poor population.

The current narrative review only included selective resources for creating discussion and was not aimed at providing a systematic review. It only talked about modes and models of financing used for delivering UHC, while there is limited information about methods of generating funding. It is, therefore, recommended that evidence on revenue generation mechanisms in developing countries shall be synthesized. There is also need for research to assess the effectiveness of current health insurance programmes in Pakistan for their up-scaling and wide coverage.
Conclusion
Malaysia, Singapore and Thailand achieved UHC by increasing expenditure on health and by introducing public and private insurance systems for improving access to healthcare. Pakistan needs to prioritise health in policy agenda and increase the size of the health budget using the same strategic pathway of introducing insurance plans as was done by the three countries so that people may be protected against financial catastrophe. This needs increase in revenue collection, developing efficient pooling mechanisms, and strategic purchasing of services for the population. Research is needed to assess the effectiveness of current health insurance programmes in Pakistan and to identify the gaps in such programmes to improve their impact.

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