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Review Article

National Health Accounts: lessons for Pakistan

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Introduction

National Health accounts (NHA) is a resource tracking exercise which primarily answers some important questions regarding the healthcare financing and economics in a country. It is a financial tracking of healthcare system of a country over a specified period of time. It is a comprehensive set of data of flow of funds in to the healthcare system in the country i.e. source and use of funds. It has a well demonstrated use as a tool for decision making for optimal resource allocation for health care. Importance of financial resources in health policy and reforms is well recognized. As such the health expenditure tracking and analysis has been carried out since early 1960s in developed and developing countries. In developed countries, maintaining the expenditure data for healthcare over the last many decades is an accepted practice. More and more countries are now compiling health accounts data which includes many developing countries. Presently, there are 68 countries which have carried out national health accounts either one or many rounds.¹ Pakistan's neighbouring countries such as China, India, Iran, Bangladesh, Nepal and Sri Lanka have also completed one or more rounds of national health accounts.

Use of evidence in health policy and practice in developing countries is vague due to two reasons; either

available evidence is not relevant to local settings or simply there is no evidence. The case of healthcare financing in Pakistan is one such example where very little data is available. Although there are claims of 1) low spending on health by government, 2) emphasis on curative services and 3) urban bias in resource allocation, but these claims are based on vague definition of health expenditure, incomplete financial data and slack compilation of financial records of public and private healthcare. The reason is simple; little importance is given to healthcare financing and economics while developing health policy and practice.

Nature and scope of Health Accounts:

NHA provide a detailed functional (e.g. preventive vs. curative services allocation and expenditure) and object classification (e.g. salaries, medicines, equipment and building) of financial data into different sources (federal ministry, other government, state owned enterprises, private insurance plans and households) and user (rich, middle class or poor, and urban and rural etc).³

The expenditure data on healthcare is a key priority area for healthcare policy and planning at the government level as well as by other stakeholders like development partners, insurance companies, private

business and even the households. Although NHA is a key resource for evidence based policy and reforms, but it can only be better utilized with other important data such as outcomes of health policy and planning. NHA dataset, along with other data on outputs and utilization of health care services, can determine the responsiveness of the health system to the population needs of healthcare. Important parameters on health system performance, efficiency of investment, beneficiary analysis and level of horizontal and vertical equity can be determined too. These analyses can provide a sound foundation for priorities setting and redirecting resources to the direly needed areas of healthcare.

Methods for carrying out National Health Accounts:

History of tracking health expenditure is traced back to early 1930s.² Systematic efforts for compiling health expenditure, with the aim to refine health policies and for international comparison, have been started in early 1960s. Since then NHA methodology has evolved towards a standard common framework, capable for country level analysis and regional and international comparisons. Now a days, the most common methodology for establishing NHA is the System of Health Accounts (SHA) of 2000, developed by the Organization for Economic Cooperation for Development (OECD) secretariat. A recent adaptation of SHA is that developed jointly by the WHO, The World Bank (WB) and the United States Agency for International Development (USAID).³ Some of the key features of this manual are broadening the definition of health expenditure by including the health infrastructure development and the expenditure on traditional medicines. WHO NHA methodology is quite similar to the SHA methodology. However, this adaptation goes beyond OECD SHA with a more detailed breakdown of source and use; which could be critical due to pluralistic nature of healthcare systems in developing countries, and are similar to the United States, for instance.⁴

The real methodological challenge in the NHA creation is defining the term health expenditure. The standard definition of health expenditure is provided by the WHO manual as any expenditure whose primary purpose is to improve health. However, different countries elaborate this definition with different approaches. This grossly affects the total expenditures on health besides other detail breakup. Similarly, in the cross country comparison as well as comparison to the previous estimates of health expenditure it can lead to different analysis and conclusion. For example, in India the NHA estimates of total health expenditure as percentage of

GDP in the year 2002 was 6.1%,⁵ compared to previous estimate of study estimated health expenditure as 4.8% of GDP during 2002.⁶ Similarly in Thailand, the NHA estimate of total health expenditure was 3.56% of GDP during 1994 compared to previous estimate of 5.1% of GDP.⁷ In case of Pakistan a specific mention would be the inter provincial variation in expenditure reporting of the public health sector. Unlike the rest of the country in Sindh province the expenditure incurred on medical education is partly reported with the Education department. If expenditure on medical education is considered as health expenditure then the expenditure specifically meant for medical colleges shall be added to the total public health expenditure in Sindh. Otherwise the expenditure incurred on medical education by the provincial health departments should be excluded from the expenditure on health.

The National Health Accounts are similar in approach and data sources of national income accounts. However, the main difference in the two is the objective achieved through them. While the NHA considers the spending on health, the national accounts take the production activities of the economy in entirety including health.^{3,4} In order to distinguish it from national income accounts, sometimes NHA has also been named as national health expenditure accounts⁸ or health resource tracking.⁹ Another difference between the two could be that the National accounts (in many cases) use the approach satellite accounts / T accounts (separate tabulation of source (right side) and use (left side) of the T table while the National health accounts adopts a source and use matrix framework, where source(horizontal) and use(vertical) of health resources makes one matrix.⁴

Resources required for NHA:

National health accounts mainly and ideally rely on the secondary data sources. This mainly reduces the cost and time required to produce NAH estimates. Moreover secondary data source has also long term sustainable effects. This fact to align NHA methodology with the National Accounts and household survey is more pressing in developing countries. The WHO manual recommends that an initial round of NHA should cost between US\$ 50000 to US\$ 75000.

The National health accounts needs diverse expertise from economics, health, accounting and statistical perspectives. As such it will require expertise in the field of national income accounting and statistics. The team of NHA should also have experts from the health sector with in-depth knowledge of healthcare system in the country. Specific to mention is the necessity to include a Health Economist in the team even if it is available on short term basis.

Regional and international experiences of NHA:

NHAs have been built upon a diverse experience as far as its commissioning and housing is concerned. However, in majority of cases, the NHA have been commissioned as well as produced by the ministry of health. A survey of 21 countries in the Asia Pacific region reveals the trend of commissioning NHA by the ministries of health is most common. Similarly, the technical production of NHA has also been characterized primarily by ministries of health followed by the public sector research agencies and national statistics agencies.¹⁰ A review of different countries (some OECD and regional countries) experience with NHA is summarized in the Table. Nonetheless, an important issue in developing

this phenomenon and asking the policy makers for more efficient deployment of the scarce resources for the greater benefit of the whole society. In developing countries, resource constraints are more severe, therefore decision making needs more rigorous and robust evidence on health care financing patterns. A more recent entry to this agenda is the effectiveness of the aid provided by the donors to the developing countries. NHA data can be used to perform an analysis which will determine equity and efficiency levels of investment in healthcare in a country^{11,12} as well as regional¹³ and international comparison.¹⁴ Such analysis can help to reformulate and reorient the policy direction and carry out healthcare reforms. Findings of NHA in 1999 in Tanzania, led the government to enhance its role of stewardship in

Table: Countries with creation of NHA experience.

Country	Institution commissioned and produced the most recent round of NHA	Rounds of NHA
Australia ¹⁹	Australian institute of Health and Welfare	Since Early 60s to 2002
Germany ²⁰	Federal Statistics Office	1992-2001
Canada ²¹	Canadian Institute of Health Information	1961-1999
South Korea ²²	Ministry of Health and Welfare Korean Institute of Health and Social Affairs, University of Yonsei, Seoul	-2002
Bangladesh ²³	Health Economics Unit, Ministry of Health Bangladesh and Data International	Two (1996/97 & 1996-01)
Nepal ²⁴	Department of Health planning, Ministry of Health, Nepal	One (1997)
Iran ²⁵	Plan and Budget Organization, Ministry of Health and Medical Education and Statistical Centre, Iran	Two (1997/98 & 2001)
India ⁵	National Health Accounts Cell of Ministry of Health with WHO collaboration	One (2001) completed in 2005
Sri Lanka ²⁶	Ministry of Health and Institute of Policy Study, Sri Lanka	Three (1995-2002)

countries is the sustainability of NHA. Unlike the developed countries, where NHA data is available in a time series, developing countries struggle for making this exercise consistent. In many countries, only a few rounds of NHA have been carried out no matter where they are constituted. However, even one and two rounds of NHA have demonstrated effectiveness for better policy programmes and reforms in health sector as mentioned earlier. Similarly, timeliness of producing data is a critical factor for the policy use of the findings of NHAs. A more recent example is from Indonesia, where the reliable estimates of NHA have yet to be compiled but due to the urgency of need of financial analysis of health sector, a public expenditure review has been carried out in 2008.

Use of NHA in Health Policy and Reforms:

Sound health policy requires sound evidence on finances, utilization and output of healthcare system. Spending on healthcare is increasing across the world due to immense financial pressures on healthcare system. In developed countries, taxpayers are showing concern for

healthcare, because 23% of the donors' contribution was channeled bypassing the government of Tanzania. Similarly in Egypt, NHA findings showed that the poor are contributing a higher portion of their income to healthcare than the rich; while in terms of utilization the situation was inverse. On the basis of these findings, the primary health care in Egypt has been reformed.¹⁵ In Rwanda, the NHA study carried out in 1998 showed excessive out of pocket expenditure on HIV/AIDS.¹⁶ These findings afterwards paved the way for introducing pre-payment schemes for the poor and hence resulted in an increased utilization of health services.¹⁷

Lessons for Pakistan:

Demand for producing National Health Accounts in Pakistan has long been stressed by different stakeholders in the health sector. Initially it has been mentioned in the project documents (PC-1) of the national health policy Unit of Ministry of Health. Afterwards staff of NHPU was also sent for training abroad. But the National Health Accounts were never produced and the

resources committed remained unutilized. However the need for NHA remained critical. It was reflected as key agenda wherever the healthcare financing issues and challenges were discussed in the Pakistan context.¹⁸

A recent development in this regard is that the Government of Pakistan has signed a Memorandum of Understanding with a donor agency for carrying out first ever National Health Accounts of Pakistan through the Federal Bureau of Statistics. The FBS has secured a grant from a bilateral agency namely German Technical cooperation (GTZ) to conduct National Health Accounts study in Pakistan. But housing NHA in FBS has also created a difference of opinion among the two government agencies. While the FBS has secured the foreign funds and have started initial work staff recruitment and mapping of healthcare schemes. The Ministry of Health advocates that it was the activity of Ministry of Health. The ministry stance seems rational but weakened due to its inability to produce NHA despite considerable lapse of time. Though FBS has taken the lead in producing NHA, it neither has the legal mandate to analyze and review the financial performance of health ministry and health sector in general nor does it have the capacity to analyze and extract policy recommendation from NHA data. On the other hand accessing data relating to health in niche and corner in the country is the mandate of the FBS under an act of parliament and not ministry of health e.g. the ministry of health will be in a difficult position when asked to access the health expenditure data of the armed forces of Pakistan, while it will be much easier for FBS to access such information. As such bringing the two key stakeholders of NHA to some sort of agreement on this issue will be crucial for the success of first ever round of NHA in the country. Below are some corrective measures for better coordination for a successful round of NHA.

1. The Steering committee constituted by the FBS for NHA should be revisited. It should ideally be headed by the Ministry of Health with membership from FBS, NHPU, civil society and planning commission. Based on the lessons learnt from other countries, especially the regional practices, it is evident that from commissioning to production and use of NHA, ministries of health played a lead role.

2. The approved PC-1 for the NHA of the FBS needs to be revised to include the most important and ultimate goals of the NHA i.e. Data analysis and policy recommendation. Ministry of Health should be made accountable for producing timely policy

recommendations based on the findings of NHA. Based on the WHO recommendation for cost of this exercise the present funds i.e. 1 million Euros are more than sufficient to complete the task by funding both the arms of this study.

3. FBS should be allowed to continue the data collection and compilation. However the minute functional boundaries between preventive and curative care, private and public expenditure, direct government expenditure on healthcare would need careful and elaborated efforts. MoH can take lead on this aspect by providing technical expertise to the FBS in the field of public health.

4. Lastly it is important for sustainability and consistency in the NHA, to develop a team of local experts which can carry out this exercise even after exhausting the foreign aid. This would necessitate a human resource development at two fronts; in the FBS as well as in the MoH to carry forward the NHA data for further analysis and policy recommendation. Only then, the ultimate goal of NHA will be achieved.

Producing a comprehensive, comparable, timely, and accurate and more importantly a policy relevant data set is a big challenge for the government. Secondly, appropriate analysis of NHA data for policy and reforms usage and later on the continuation of this exercise at least with some interval would remain questionable. This requires some concrete measures and political commitment at the very outset of this exercise. The ultimate user of the NHA is MoH, for a better policy making and need based planning for the health sector. Therefore, MoH and FBS should join hands with more commitment for making first round of NHA a fruitful and policy relevant document.

Conclusion

National Health Accounts have demonstrated significant impact on better policy development and in a major shift in health policy for better healthcare. NHA has evidently provided more refined estimates, rejecting previous perception about health expenditure. As such in Pakistan claims such as low expenditure on healthcare, urban bias in resource allocation and emphasis on curative services, can only be advocated if supported by NHA data. A robust and comprehensive data set based on systematically chalked out framework can provide bases for an evidence-based health policy and reform agenda for better utilization of already scarce resource in Pakistan. A great deal of ownership and dedicated efforts of the key stakeholders only would make this dream come true!

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References

1. WHO. Strategy on health care financing for countries of the Western Pacific and South-East Asia Regions (2006-2010). Geneva: World Health Organization, 2005.
2. Anonymous. The Committee on the costs of medical care presents its final report, *The Milbank Memorial Fund Quarterly Bulletin* 1933; 11: 21-30.
3. WHO. A guide to producing National Health Accounts, with special application for low and middle income countries. Geneva: World Health Organization, 2003.
4. Berman PA. National Health Accounts in Developing Countries: appropriate methods and recent application. *Health Econ* 1997; 6: 11-30.
5. National Health Accounts Cell. National Health Accounts India, 2001-02. New Delhi Ministry of Health and Welfare, 2005.
6. WHO. National Health Accounts, Country information. (Online) (Cited 2008 July 8). Available from URL: <http://www.who.int/nha/country/>.
7. Tangcharoensathien V, Laixuthai A, Vasavit J, Tantigate N, Prajaubmoh-Ruffolo W, Vimolkit D, et al. National Health Accounts Development: Lessons from Thailand, *Health Policy Plan* 1999; 14: 342-53.
8. Cowan C A, Hartman B H. Financing Health Care: Businesses, Households, and Governments, 1987-2003. Baltimore: Centers for Medicare and Medicaid Services, July 2005 (Health care financing review web exclusive). (Online) Available from URL: http://www.cms.hns.gov/apps/review/web_exclusives/cowan.pdf.
9. Powel-Jackson T, Mills A. A review of health expenditure resource tracking in developing countries. *Health Policy Plan* 2007; 22: 353-62.
10. Eliya R, Ravi P. Status of National Health Accounts in Asia Pacific region: Results of APNHAN Survey. Sri Lanka, Asia Pacific Network of National Health Accounts, 2001.
11. Nandakumar AK, Nada K, Ibrahim A, Ezzat M, Latif MA, Sadiq A. Health Expenditure Review: Technical Report No. 35, Alexandria, Egypt. Bethesda, MD: Partnerships for Health Reform Project, Ab Associates Inc. May 1999.
12. British Council, Kathmandu, Nepal and Health Economics and Financing Unit, Ministry of Health Nepal. Public Expenditure Review of the Health Sector in Nepal. Nepal, Ministry of Health, 2003.
13. Data International, Nepal Health Economics Association, and Institute of Policy Studies. Equity in Financing and Delivery of Health Services in Bangladesh, Nepal and Sri Lanka. Colombo, Sri Lanka, Institute of Policy Studies, June 2001.
14. van Doorslaer, Eddy, Wagstaffe A, Rutten F, eds. Equity in the Finance and Delivery of Health Care: An International Perspective. Oxford: Oxford University Press, 1993.
15. De Susna, Dmytraczenko T, Brinkerhoff D, Tien M. Has Improved Availability of Health Expenditure Data Contributed to Evidence-Based Policymaking? Country Experience with National Health Accounts, Technical Report No. 022. Bethesda, MD, The Partners for Health Reform plus Project, Ab Associates Inc., May 2003.
16. Schneider P, Nandakumar AK, Porignon D, Bhawalkar M, Butera D. Rwanda National Health Accounts 1998 (Technical Report No. 53). Partnerships for Health Reform (PHR), September 2000.
17. Schneider P, Schott W, Bhawalkar M, Nandakumar AK, Diop F, Butera D. Paying for HIV/AIDS services. UNAIDS Best Practice Collection, Geneva, UNAIDS, UNICEF, UNDP, UNFPA, UNDCP, ILO, UNESCO, WHO, World Bank, 2001.
18. Nishtar S. Health Indicators of Pakistan- Gateway Paper II. Islamabad: Heartfile, 2007.
19. Ingham L, Bennetts R, Haynes T. SHA- Based Health Accounts of 13 Countries- country studies- Australia: National Health Accounts, OECD Health Technical Papers, No.1. Paris, OECD Publications, 2004.
20. Zifonun N. SHA- Based Health Accounts of 13 Countries- country studies- Germany: National Health Accounts, OECD Health Technical Papers, No.4. Paris, OECD Publications, 2004.
21. Gilles F. SHA- Based Health Accounts of 13 Countries- country studies- Canada: National Health Accounts 1999, OECD Health Technical Papers, No.2. Paris, OECD Publications, 2004.
22. Jeong H. SHA- Based Health Accounts of 13 Countries- country studies- Korea: National Health Accounts 2001, OECD Health Technical Papers, No.7. Paris, OECD Publications, 2004.
23. Data International. Bangladesh National Health Accounts, 1999-2001. Dhaka: Health Economics Unit, Ministry of Health and Family Welfare, 2003.
24. Prasai DP, Karki D, Sharma TM, Ganwali D, Subedi GR, Singh AB. Nepal National Health Accounts, 2001-03. Kathmandu, Ministry of Health and Population, Health Economics Unit, 2006.
25. World Bank. Iran National Health Accounts 1997-98. Partner for Health Reforms (PHRPlus), Ab Associates, 1998.
26. Institute of Policy Studies. Sri Lanka National Health Accounts 2000-02. Colombo, Ministry of Healthcare, Nutrition and Uva-Wellassa Development, 2005.