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Regional Health Accounts for Pakistan—Provincial and District Health Expenditures and the Degree of Districts Fiscal Autonomy on Health

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1. INTRODUCTION

The first ever National Health Accounts for Pakistan have been published in May 2009 by FBS in collaboration with GTZ. The activities of NHA were started in January 2008 and it took 17 months to complete the first round, which is a very short period considering the experiences of other countries in the region. NHA estimate health expenditures by four dimensions namely financing sources, financing agents, health care providers and health care functions.

In the first round, two dimensions financing sources and financing agents were covered. Health expenditures by financing source give information on some important policy questions such as who pays, who finances under what scheme that can potentially help in devising financing strategies. Health expenditures by financing agents provide information on policy questions such as what is the overall financing structure, what are the pooling arrangements and what are the payment/purchasing arrangements which can give feedback to health policy decisions related to pooling arrangements and regulation of payers.

NHA also present the regional accounts i.e. the expenditures being allocated to the regions according to the location where the health care is provided. This includes health expenditures by federal government, provincial government, district government, cantonment boards, Employees Social Security Institutions, out-of-pocket expenditures (OOP)[1] and the expenditures by donor organisations. Such regionalisation of expenditures is very important as they are not only potentially helpful at provincial level in taking health related policy decisions but also give a useful information for a national level analysis.

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[1]For details on private out-of-pocket expenditure and their use in NHA see Lorenz (2009).

The scope of this paper is broadly to have analysis of the regional accounts, to have comparison of health expenditure figures of NHA with figures from other sources i.e. comparison of Punjab provincial and district government figures with that of ADB figures and may be to come up with reasons for differences if any. Lastly, the paper does a comparison of district government health expenditures between districts (in each province) and then comparison of provincial and district government health expenditures between provinces. The comparison of provincial and district government expenditures also analyses their share to be used as a proxy to assess the degree of fiscal autonomy of districts in carrying out health related activities.

Our findings can be applied as recommendations for future rounds of NHA in Pakistan regarding formats and necessities of detailed health expenditure data collection to ensure evidence based decision making not only on federal, but also on provincial and district level. Nevertheless, NHA is a pure accounting framework in monetary terms, describing financial flows in health systems comprehensively, but not carrying out productivity analyses or quality assessments of health care.

Regarding data quality it is important to keep in mind when undertaking these analyses that Total Health Expenditures (THE) do include estimations due to a combination of public (PIFRA[2]) and private[3] (household surveys) expenditure data. In contrast to that, the analyses in this article comparing district expenditures do not include estimations, since they are purely based on official PIFRA data, which are taken from AG and AGPR publications.

2. PROVINCIAL HEALTH ACCOUNTS

The NHA 2005-06 report also includes some results of the province wise breakdown of health expenditures. These Provincial Health Accounts are sub-accounts of the NHA and track expenditures on health for a specific regional section of the health system. According to the principle of regionalisation expenditures are allocated to the regions according to the location where the health care has been provided; the residency of the patient is not a criterion.

The following Table 1 shows the relative results of health related expenditures in the regions and gives the percentages of the single Financing Agents for each province. These shares can be compared with the national shares for each Agent. The shares of the Agents on national level include some expenditure which can not be allocated to a single province or are allocated to the Islamabad capital territory. This holds for some federal expenditure as well as for some Zakat and all private insurance expenditures. The basic figures for the calculations shown here are NHA estimations (combination of PIFRA data and published survey results) which became official statistics with their publication by FBS in 2009.

[2]PIFRA is the Project to Improve Financial Reporting and Auditing, which was introduced by the Auditor General of Pakistan in 1994 in order to improve the financial reporting system and to ensure good governance.

[3]For detailed information on different survey results affecting NHA results see Lorenz (forthcoming).

Table 1

Provincial Expenditures per Financial Agent in %

	In Percent of Total Expenditures (per Province or Country)				
Type of Health Expenditure	Punjab	Sindh	Khyber Paktunkhwa	Baloch.	Pakistan
Military Health Expenditure	5.8%	1.8%	2.8%	4.0%	4.0%
Provincial/Federal Government	9.6%	16.9%	13.9%	22.5%	20.5%
District Government	8.1%	13.5%	1.1%	18.7%	7.6%
Cantt. Boards	0.1%	0.1%	0.1%	0.1%	0.1%
Social Security Institutions	1.5%	1.4%	0.2%	0.4%	1.1%
Zakat Health Expenditure	0.1%	0.1%	0.1%	0.1%	0.3%
Private Insurance	–	–	–	–	0.2%
OOP Health Expenditure	74.7%	66.0%	76.5%	38.7%	64.3%
Donors Organisations	0.2%	0.1%	5.3%	15.5%	1.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Percentage calculations based on absolute figures per province given in database, Federal Bureau of Statistics, National Health Accounts, 2009, 45.

The shares of military health expenditures are relatively high in Punjab (5.8 percent) and Balochistan (4 percent); in Sindh (1.8 percent) and Khyber Pakhtunkhwa (2.8 percent) they are smaller than at national level (4 percent). The social security expenditures as percent of the THE are very small in Khyber Pakhtunkhwa (0.2 percent) and Balochistan (0.4 percent); in Punjab (1.5 percent) and Sindh (1.4 percent) social security figures are higher than the national level (1.1 percent). The OOP are lowest in Balochistan (only 38.7 percent) compared to the other provinces and the national level; accordingly the provincial/federal (22.5 percent) as well as the district (18.7 percent) expenditures are highest in this province. This situation is similar in Sindh which has second lowest OOP (66 percent) and second highest provincial/federal (16.9 percent) and district (13.5 percent) expenditures. The share of donor expenditures within the province varies from less than 1 percent (0.2 percent Punjab and 0.1 percent Sindh) to 5.3 percent in Khyber Pakhtunkhwa and 15.5 percent in Balochistan.

The total results can also be expressed in USD per capita spent on health by using the total population of each province.

Table 2

Provincial THE per Capita

		Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan.	Pakistan
THE	million PKR	95,782	34,407	28,177	7,560	185,074
THE	USD	1,598,231,270	574,119,806	470,165,193	126,147,172	3,088,166,194
Population 2005	estimated	85,650,000	35,410,000	20,640,000	7,630,000	153,960,000
Population 2006	estimated	86,255,000	35,864,000	21,392,000	8,004,000	156,770,000
Population 2005-6	estimated	85,952,500	35,637,000	21,016,000	7,817,000	155,365,000
THE per Capita	at average exchange rate					
	USD	18.66	16.21	22.78	16.53	20.06

Sources: THE in PKR: Federal Bureau of Statistics, National Health Accounts, 2009. Exchange rates: The exchange rate for 2005/06 is calculated as mean of the exchange rate 2005 (59.51) and 2006 (60.35). UN, World Statistics Pocketbook, http://data.un.org/CountryProfile.aspx?crName=Pakistan and Nationmaster http://www.nationmaster.com/graph/eco_exc_rat_to_usd_2006-economy-exchange-rates-usd-2006.

The total population figures for 2005-06 are calculated as mean of the years 2005 and 2006 and are taken from the Economic Survey 2007/08 http://www.finance.gov.pk/admin/images/survey/chapters/Chapter12%2008-09.pdf Table 12.7; they differ slightly to the figures given in the Statistical Yearbook, http://www.statpak.gov.pk/depts/fbs/publications/yearbook2008/Population/16-1.pdf. A comparison of different official population figures and their impacts on OOP can be found in Lorenz (2009).

The THE per capita are relatively different between the provinces and range from 16 USD in Sindh, 17 USD in Balochistan, 19 USD in Punjab to 23 USD in Khyber Pakhtunkhwa; THE per capita for Pakistan is 20 USD.

To sum up it was found that the relative importance of single agents differs strongly between provinces. Additionally the THE spent in each province reaches from 16 to 23 USD.

3. COMPARISON NHA RESULTS WITH ADB FIGURES FOR PUNJAB

ADB has published a study called *Public Expenditure Review—Health Sector in Punjab.* Public sector expenditure on health in Punjab can be divided into two major categories, one is the provincial setup and the other is districts. From here onwards we are just talking about public expenditure by provincial or district governments; total health expenditures including private expenditures are not analysed here. This means the following analyses are based on officially published PIFRA data and do not include expenditure estimations.

Provincial Government Expenditure

First the results for the provincial health expenditures are compared and possible reasons for differences in the results will be discussed. The following table shows the results from ADB for the province Punjab for the financial year 2005-06.

The expenditures are divided into current expenditure (expenditures on goods and services, such as salaries, rent, maintenance and interest payments) and development expenditure (also called capital expenditure, which refers to the funds spent for the acquisition of long-term assets) and figures are given for budget (which means they are allocated) and actual expenditure (they are already spent). Relevant for the comparison is the sum of the actual current and development expenditure. This figure has to be compared with the NHA result, which is given in the following Table 3.

Table 3

Provincial Governmental Health Expenditure Punjab in Million PKR

Expenditure FY 2005-06	ADB		FBS NHA	
	Budget	Actual		
Current	6,027	6,012		
Development	3,290	1,217		
Total	9,317	7,229	7,161	Department of Health and other
			1,072	Dep. Population Welfare
			172	Health Education
			747	Reimbursem. of med. charges
			9,152	Total

Source: Figures taken from ADB, authors highlighting of the two compared figures, authors extractions from NHA database, Federal Bureau of Statistics, National Health Accounts, 2009.

From the results of NHA report the expenditure of the provincial department of Health (7,161 million PKR) are relevant, which has to be compared with the ADB figure (7.229 million PKR), which is about 1 percent higher.

District Governments Expenditure

In the ADB study among others the health expenditures of Punjabi districts are published. FBS NHA section also collected data from districts in Punjab which are published in the NHA report 2005-06. Provincial Accountant General (AG) data do not capture all expenditures, because each district is calculating individual expenditures additionally. These are according to an ordinance passed in 2001, which gave more autonomy to districts and gave more power to them compiling own expenditures. Regarding the availability of data they have to be differentiated between appropriation accounts from AG and civil accounts from World Bank.

From AG Punjab district data in form of appropriation accounts[4] for 19 out of 35 districts were made available in softcopy format. The missing 16 district data were given in hardcopy, which have been entered by NHA section of FBS. For districts not only the total figures of public district expenditures are available, but also additional information on all entities and objects in the district, including health, education and other expenditures for the 19 softcopy districts. For the hardcopy districts only health relevant expenditures are available with FBS. From World Bank district data in civil accounts for Punjab are available, which only show lump sum figures. From ADB the following figures on district health expenditure are given in Table 4.

Table 4

District Governmental Health Expenditure in Million PKR[5]

Expenditure FY 2005-06	ADB		FBS NHA
	Budget	Actual	Actual
District	~~7,237~~	6,449	7,720
Cantonments Boards			100
Total			7,820

Source: ADB, authors highlighting of the two compared figures, authors extraction (district, cantonment and total) from NHA database, Federal Bureau of Statistics, National Health Accounts, 2009.

The district health expenditures are given in actual figures not in budget figures. The actual expenditure is 6,449 million PKR in ADB results compared to 7,720[6] million PKR, which have been calculated in NHA.

The comparison of Punjab health expenditures has shown that there are only slight differences between ADB and FBS results. For provincial expenditure the ADB figure is less than one percent higher than the FBS figure. For district expenditure the FBS figure is about 20 percent higher than the ADB figure maybe due to the inclusion of health

[4]They are very similar to PIFRA, but differ to some extent, because some old classifications are used.

[5]The figures for the districts are only given in current expenditures, for provinces current and development figures are available.

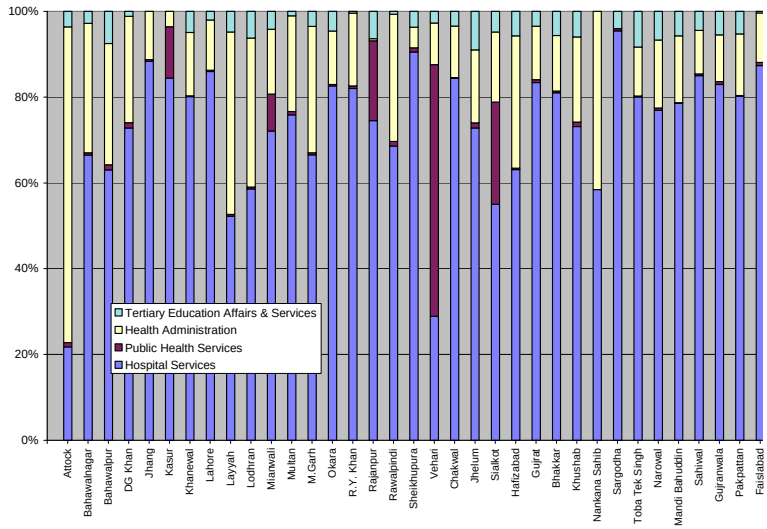
[6]The ADB figure is also without inclusion of cantonments, therefore the figure 7720 has to be used for further analyses.

education as well as some health relevant expenditures from other grants (e.g. hospital construction).

4. DISTRICT GOVERNMENTS HEALTH EXPENDITURE— INTER DISTRICT COMPARISON

This chapter compares the health expenditures between different district governments for each province and for whole Pakistan. Therefore we apply the detailed function classifications of the PIFRA codes which are relevant for health expenditure. These codes are 093-Tertiary Education Affairs and Services,[7] 076-Health Administration, 073-Hospital Services (Nursing and Convalescent home care) and 074-Public Health Services. The first can be further disaggregated into general universities (093101) and professional universities (093102); relevant for health education are the professional universities/institutes under code 093102 as they include medical colleges and nursing schools. Tertiary care is generally defined as specialised consultative care, usually on referral from primary or secondary medical care personnel, by specialists working in a centre that has personnel and facilities for special investigation and treatment. Public Health Services (code 074) include preventive health programmes such as HIV/AIDS control programme, Tuberculosis control programme, maternal and child health programmes. So these are basically the population based programmes primarily aimed at improving and maintaining health of populations as opposed to the curative services which are individual based.

Fig. 1. Punjab Districts, Public Health Expenditure by Function for the Year 2005-06

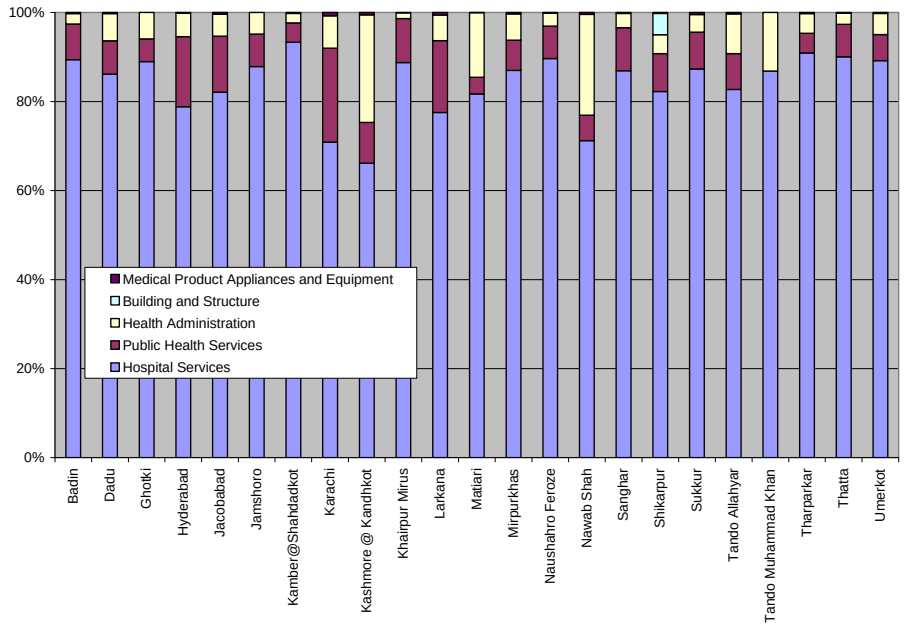


Source: Disaggregated functional expenditures per district taken from database, Federal Bureau of Statistics, National Health Accounts Pakistan 2005-6.

[7]According to SHA manual, medical education and health-related professional training and research is not included in the THE, but WHO gives countries the liberty to include categories which are seen as integral part of the health system [WHO (2003)].

The comparison of the functionally disaggregated expenditure between districts of Punjab shows that in all the districts (except two) the highest expenditure is on hospital services; expenditure on this post are ranging from 22 till 96 percent of the total public health expenditure. This is followed by expenditure on health administration except in district Attock and district Vehari where the highest expenditures are on health administration and public health services respectively. This variation in two districts may be due to differences in understanding of PIFRA classification and data recording by the regional AG and AGPR offices.[8] The expenditures on health administration in all districts are also relatively heterogeneous and range from 0-74 percent. Tertiary care is of lower importance in all districts and ranges from 0-9 percent.

Fig.2. Sindh Districts, Public Health Expenditure by Function for the Year 2005-06

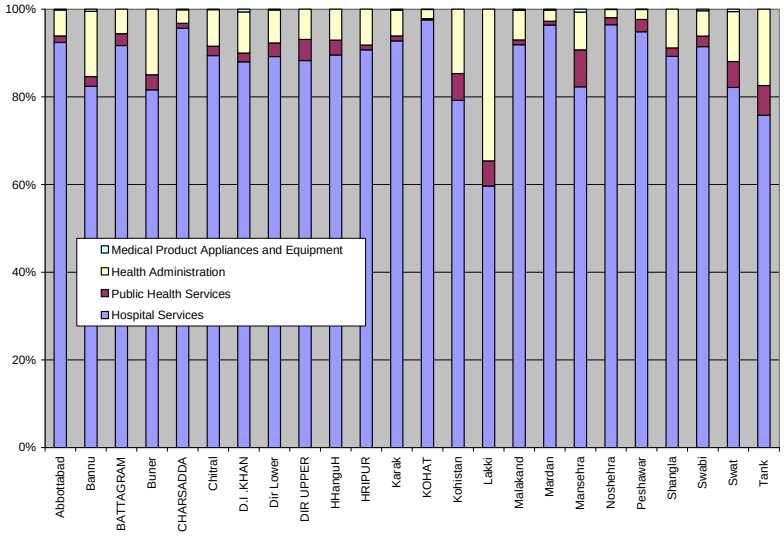


Source: Disaggregated functional expenditures per district taken from database, Federal Bureau of Statistics, National Health Accounts Pakistan 2005-6.

For Sindh the Figure 2 shows that expenditures on hospital services are highest for all districts; they range between 66 and 93 percent with an average of 84.2 percent. Health administration costs are higher in the districts Matiari (14.5 percent), Nawab Shah (22.6 percent) and Kashmore@Kandhkot (24 percent); the average of all Sindh districts is 7 percent only. Public health services are higher in Karachi (21 percent), Larkana (16 percent) and Jacobabad (13 percent); the average is 8.4 percent. Building and structure is only relevant for district Shikarpur with 5 percent. Medical product appliance is less than 1 percent in all districts.

[8]The Auditor General's organisation is the prime institution in the country for ensuring public accountability and fiscal transparency in governmental operations. The Accountant General Pakistan Revenues (AGPR) is responsible for the centralised accounting and reporting of federal transactions.

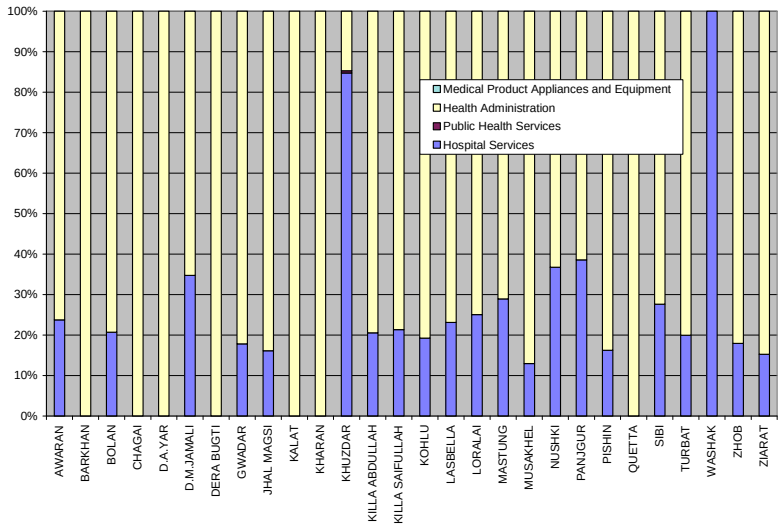
Fig. 3. Khyber Pakhtunkhwa Districts, Public Health Expenditure by Function for the Year 2005-06



Source: Disaggregated functional expenditures per district taken from database, Federal Bureau of Statistics, National Health Accounts Pakistan 2005-6.

For Balochistan hospital services as well are highest for all districts with a range between 60 to 98 percent. For health administration expenditure is highest in district Lakki with 35 percent compared to an average of all districts in Balochistan of 9 percent.

Fig. 4. Balochistan Districts, Public Health Expenditure by Function for the Year 2005-06



Source: Disaggregated functional expenditures per district taken from database, Federal Bureau of Statistics, National Health Accounts Pakistan 2005-6.

In Balochistan the expenditure structure is different to other provinces, because most districts have given their highest expenditure for health administration (range from 0 to 100 with an average of 78 percent). The second highest expenditure is hospital services, which range from 0 to 100 with an average of 22 percent. Public health services are only given in one district Khuzdar with less than one percent. Expenditures for medical product appliances are zero in all districts of Balochistan.

Within each province most districts—besides a few exemptions—have a similar expenditure structure. For districts in Punjab, Sindh and Khyber Pakhtunkhwa the majority of expenditures are made for hospital services; only most districts in Balochistan report health administration to be their highest expenditure. This difference might occur due to different understanding of the requested disaggregation classifications by the regional AG and AGPR offices.[9]

5. PROVINCIAL/DISTRICT GOVERNMENTAL HEALTH EXPENDITURE—INTER PROVINCE COMPARISON AND DEGREE OF FISCAL AUTONOMY

In this section we describe the legal constitution of districts autonomy from the provinces; in this regard we then analyse the impacts on the distribution of health expenditure between districts and provinces.

The fiscal autonomy of the districts is fixed in the devolution of 2001, which deals with subsidiary and the vertical distribution of responsibilities between different governmental bodies. Decentralisation can broadly be defined as the transfer of authority and power in public planning, management and decision-making from higher to lower levels of government or from national to sub-national levels.[10,11,12] Different processes and models exist within decentralisation such as (1) de-concentration, (2) delegation, and (3) devolution.[13]

(1) In deconcentration administrative responsibilities are transferred to locally based offices of a national government ministry and the deconcentrated units remain accountable to the central authority for what they use and the outputs produced.
(2) In delegated forms of decentralisation, management responsibilities are transferred to semi-autonomous entities which are outside the regular bureaucratic structure. The aim is to free national government from day-to-day management functions. Again, the entity remains accountable to national government.
(3) In a devolved form of decentralisation, political and administrative authority is transferred to an independent local-level statutory agency, for example a municipality or local council. Also, the local level is able to generate revenue due to its statutory status. In this form of decentralisation authority for organising, providing and partly financing services is given to a local

[9]And has to be clarified in the next data requests by the two mentioned institutions.
[10]See Rondinelli (1981), 133ff.
[11]Collins and Green (1994), 58ff.
[12]Mills, *et al.* (1990).
[13]Rondinelli, *et al.* (1983).

> government body or similar agency ultimately responsible to the local population. They are rarely completely autonomous, but are bodies largely independent of the national government in their areas of responsibility as opposed to being subordinate units as in the case of de-concentration.

In 2001, Local Government Ordinance 2001 was passed in Pakistan to introduce devolution based on the realisation that devolution would provide a mean for community participation and local self-reliance and will also ensure the accountability of government officials to the population. The devolution of powers in public planning, management and decisions related to finances changed the fiscal structure and the recording of the fiscal data as well. Appropriation Accounts were maintained at the district level for expenditures incurred by districts while provincial Appropriation Accounts only included the expenditures at the provincial level. The process of devolution has to be progressive to shift from one system to another and to ensure the capacity building of the district management teams. For this reason, the four provinces were at different levels of devolution and this can be seen using the health expenditures by provinces and districts as a proxy indicator of level of devolution (see Table 5).

Table 5

Provincial and District Governmental Health Expenditures 2005-06

Provincial/ District	In %				in Million PKR
	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Total
Provincial	52.1%	53.5%	92.2%	52.0%	19,007
District	47.9%	46.5%	7.8%	48.1%	14,081
Total	100.0%	100.0%	100.0%	100.0%	33,088

Source: Extractions of absolute figures from database, Federal Bureau of Statistics, NHA Pakistan 2005-6.

It is quite obvious from the table that for the three provinces (Punjab, Sindh and Balochistan) the total public health expenditure incurred is about equally shared by provincial and district levels i.e. devolution of fiscal powers in health related activities. Whereas, in the case of Khyber Pakhtunkhwa the provincial government spends 92 percent while districts spend only 8 percent of the total public health expenditures, which might possibly due to limited devolution of fiscal powers.

The following Table 6 shows the percentage to which the expenditure are spend on the functions for major, minor and detailed functions and for all provinces.

Table 6

Public District Health Expenditures by Functions for Provinces

Major Function Code	Major Function	Sindh	Punjab	Balochistan	Khyber Pakhtunkhwa	Total
		% of Provincial District Grand Total				PKR
07	Health	99.8	96.4	100.0	100.0	13,796,124,389
04	Building and Structure	0.2	0.0	0.0	0.0	8,844,519
09	Education Affairs and Services	0.0	3.6	0.0	0.0	275,326,474
Total		99.8	96.4	100.0	100.0	
Minor Function Code	Minor Function	% of Provincial District Grand Total				PKR
045	Construction and Transport Total	0.2	0.0	0.0	0.2	8,844,519
071	Medical Products, Appliances and Equipments	0.3	0.0	0.0	0.3	16,170,571
073	Hospital Services	82.2	75.3	21.2	82.2	10,206,086,333
074	Public Health Services	11.5	3.6	0.0	11.5	815,230,436
076	Health Administration	5.8	17.5	78.7	5.8	2,758,637,049
093	Tertiary Education Affairs and Services	0.0	3.6	0.0	0.0	275,326,474
Total		100.0	100.0	100.0	100.0	
Detail Function Code	Detailed Function	% of Provincial District Grand Total				PKR
0457	Construction Total	0.2	0.0	0.0	0.2	8,844,519
0711	Medical Products, Appliances and Equipments Total	0.3	0.0	0.0	0.3	16,170,571
0731	General Hospital Services Total	82.2	74.0	21.2	82.2	10,096,954,214
0733	Medical and Maternity Centre Services	0.0	1.2	0.0	0.0	98,346,958
0734	Nursing and Convalascent Home Services	0.0	0.1	0.0	0.0	10,785,161
0741	Public Health Services	11.5	3.6	0.0	11.5	807,425,724
0761	Administration	5.8	17.5	78.7	5.8	2,744,575,584
0931	Tertiary Education Affairs and Services	0.0	3.6	0.0	0.0	297,192,651
	Grand Total in PKR	4,630,072,134	7,719,837,903	1,414,730,850	315,654,495	14,080,295,382

Source: Extractions of absolute figures from database, Federal Bureau of Statistics, NHA Pakistan 2005-6.

Comparing the health expenditures by districts between provinces shows that the highest expenditure is done on hospital services in all provinces except Balochistan where highest expenditure is on health administration. So the overall pattern of health expenditures by districts is comparable in three provinces (Punjab, Khyber Pakhtunkhwa and Sindh). Also the point worth noticing is that expenditures on health education at district level only appear for Punjab, probably because it was only in Punjab that the districts were encouraged to have their own nursing, Lady Health Visitor and Paramedical Training Institutes.

Per Capita Comparison

The following Table 7 gives an overview on the per capita PKR spend from provincial and district level in all provinces.

Table 7

Per Capita (PKR) Provincial and District Government Health Expenditures

	In Rs Per capita			
Provincial / District	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Provincial	98	150	178	196
District	90	130	15	181
District share	47.9%	46.4%	7.8%	48.1%
Total	188	280	193	376

Source: Extractions of absolute total figures from database, Federal Bureau of Statistics, NHA Pakistan 2005-6.

Comparing the per capita expenditures by the civilian territorial governments i.e., provincial and district governments, it is highest for Balochistan. *Provincial* Balochistan government spends 196 PKR per capita compared with 98 PKR, 150 PKR and 178 PKR per capita for Punjab, Sindh and Khyber Pakhtunkhwa respectively. *District* Balochistan government spends PKR 181 per capita compared with PKR 90, PKR 130 and PKR 15 per capita for Punjab, Sindh and Khyber Pakhtunkhwa respectively. While the total (provincial and district government) for Balochistan spends 376 PKR per capita as compared to 188 PKR, 280 PKR and 193 PKR per capita for Punjab, Sindh and Khyber Pakhtunkhwa respectively. It is suggested that per capita cost of health services in the provinces should be combined with this expenditure data to have more inferential analysis. This suggestion is based on the rationale that the cost of services if vary between provinces, the expenditure on health to have same set of services would be different and so the financial requirements would also vary between provinces.

6. CONCLUSION

For this paper we have carried out four analyses: (1) Provincial Health Accounts for Pakistan, (2) analysis of Punjab provincial and district health expenditures, (3) analysis of district expenditures and comparison within all Pakistani provinces, and (4) analysis of the importance of provincial and district health expenditures in each province as indicator for the degree of fiscal autonomy in health activities within the state.

(1) To sum up Provincial Health Accounts it was found that the relative importance of single agents differs strongly between provinces; this holds especially for provincial and district government expenditure as for OOP. Furthermore the estimations of THE spent per province range from 16 USD in Sindh to 23 USD in Khyber Pakhtunkhwa.

(2) The comparison of Punjab health expenditures has shown that there are only slight differences between ADB and FBS results. For provincial expenditure the ADB figure is less than one percent higher than the FBS figure and the district expenditure differ probably due to the inclusion of health education as well as some health relevant expenditures from other grants like hospital construction.

(3) Within each province most districts—besides a few exemptions— have a similar expenditure structure. For districts in Punjab, Sindh and Khyber Pakhtunkhwa the majority of public expenditures are made for hospital services; only most districts in Balochistan report health administration to be their highest expenditure.

(4) For the three provinces (Punjab, Sindh and Balochistan) the total public health expenditure are about equally shared by provincial and district levels. In contrast to that in Khyber Pakhtunkhwa the provincial government spends 92 percent while districts spend only 8 percent of the total public health expenditures, which might be possibly due to limited devolution of fiscal powers.

Overall the analysis of RHA has found some immense differences between single districts and even provinces which raise questions and should be analysed in detail in future research on health expenditure in Pakistan. Therefore it is not sufficient to aim at PHA, but also to include district analyses and develop full RHA.

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Comments

The paper on regional Heath Accounts for Pakistan is a useful exercise to gauge the flow and magnitude of health expenditures at different tiers of administration and get insights into the overall financing structure and financial health of the system to make policy decisions. I would like to commend the authors for their bold initiative in choosing a topic that is much less researched in areas of health, and for using comprehensive data on health expenditures down to district level and making comparisons within provinces to examine health accounts and fiscal autonomy within the country. Since health programmes' implementation and service provision have become a provincial responsibility, this study has its merits in analysis of health accounts at provincial and district levels to seek guidance for future financial requirements and allocations.

This exercise involves a lot of number crunching and data analysis making it a challenging task to yield accurate and reliable estimates on health accounts and the variations in different types of health expenditures incurred in the four provinces and their respective districts. As health systems data are highly inadequate in Pakistan, the results of the study reveal many data inconsistencies and discrepancies in health expenditure patterns which need further explanation and exploration. For example in Punjab province, health expenditure measured by the Asian Development Bank (ADB) is about one percent higher than the government figure (FBS) for fiscal year 2005-06, whereas for district expenditure, the reverse is apparent with FBS showing about 20 percent higher expenditures than the ADB. This raises questions about the precise estimation of relevant health expenditures at district level as the relative importance of different types of expenditures including grants, health administration, hospital services etc., differ greatly between provinces. These discrepancies need further probing and refinement of data used for the analysis.

Given the fact that private sector constitutes a large part (more than 70 percent) of health sector service provision, it is important to accurately assess its contribution to the total health expenditure. The analysis does not sufficiently cover this aspect of health financing. The results show that out of pocket expenses (private expenditures) are quite low in Balochistan, whereas the donor organisations are shown to be the major financial agent in comparison with other provinces. This situation needs further clarification in terms of the varying cost of services between provinces and its impact on service provision and health administration.

Furthermore, per capita health expenditures have been estimated on the basis of population figures of 2005-06 which range from 16 USD in Sindh to 23 USD in Khyber Pakhtunkhwa. The population base used to estimate per capita figures appears to be an underestimate when compared with the population projection figures of NIPS, thereby indicating an upward bias in per capita figures estimated in the study. These estimates need to be compared with other similar calculations to support the accuracy and precision of those estimates.

Overall, some significant differences have been found in health expenditures between single districts and even provinces which need further detailed investigation and analysis in future research to develop a comprehensive health accounts system in Pakistan.

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