

# Households Study on Out-Of-Pocket (OOP) Health Expenditure in Pakistan

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# Background

- Health Expenditure to GDP Ratio
- Public has no choice but to seek health care from own Pocket, which dominant source of finance
- In Pakistan OOP Expenditure is two third of total expenditure
- Pakistan annual per capita income is \$1,368 but health expenditure is \$35

# Background

Cont..

	2005-06	%	2007-08	%
Federal Government	23,816	9.2	27,664	8.29
Provincial Government	19,007	7.4	27,757	8.32
District Government	14,215	5.5	23,547	7.06
Social Security Funds	2,839	1.1	3,259	0.98
Autonomous Bodies/Corporation	1,450	0.6	1,725	0.52
Private Health Insurance	285	0.1	523	0.16
<b>OOP Health Expenditure</b>	<b>177,010</b>	<b>68.6</b>	<b>220,508</b>	<b>66.09</b>
Local NGOs	15,919	6.2	19,023	5.70
Official Donor Agencies	3,565	1.4	9,626	2.89
Total	258,106	100.0	333,632	100.00

Source: National Health Accounts 2009-10, Pakistan Bureau of Statistics

# Background

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- Share of OOP health expenditure out of the total household income
- National Health Accounts
- Meeting public demand of healthcare is a great challenge for governments
- Unmet demand, people may opt for less costly healthcare like traditional or sub optimal care, or even forgo healthcare

# Objectives

- Estimate nationally representative OOP health expenditures for Pakistan
- Provide OOP health expenditures over time and across regions in Pakistan
- Analyze OOP health expenditures with respect to vulnerable groups in Pakistan

# Data

- We pooled six nationally representative HIESs (1998-99, 2001-02, 2004-05, 2005-06, 2007-08 and 2010-11)
- Surveys cover all four provinces
- Each survey is represented by around 15,000 households
- Total sample is 91,404 households
- OOP health expenditure is reported in the consumption module

# Data

Cont..

Province	Region	1998-99	2001-02	2004-05	2005-06	2007-08	2010-11	Total
Punjab	Rural	3,733	3,769	3,606	3,892	3,868	4,019	22,887
	Urban	2,533	2,544	2,511	2,790	2,768	2,935	16,081
	Total	6,266	6,313	6,117	6,682	6,636	6,954	38,968
Sindh	Rural	2,174	2,173	1,980	2,107	2,093	2,296	12,823
	Urban	1,532	1,533	1,497	1,666	1,672	1,802	9,702
	Total	3,706	3,706	3,477	3,773	3,765	4,098	22,525
KPK	Rural	1,844	1,825	1,878	1,901	1,888	1,913	11,249
	Urban	851	841	1,087	1,049	1,049	1,041	5,918
	Total	2,695	2,666	2,965	2,950	2,937	2,954	17,167
Balochistan	Rural	1,403	1,404	1,434	1,313	1,408	1,524	8,486
	Urban	612	621	713	735	766	811	4,258
	Total	2,015	2,025	2,147	2,048	2,174	2,335	12,744
Pakistan	Rural	9,154	9,171	8,898	9,213	9,257	9,752	55,445
	Urban	5,528	5,539	5,808	6,240	6,255	6,589	35,959
	Total	14,682	14,710	14,706	15,453	15,512	16,341	91,404

- In first three surveys, the health expenditure categories
  - Purchase of medicines, equipment supplies etc
  - Medical fees paid to doctors, Hakeem (traditional healer) etc. outside hospital including medicines
  - Hospitalization including doctors' fees, laboratory tests, X-ray charges etc
  - Dental/Optical care and all other expenses on healthcare not classified elsewhere.
- In last three survey, the later three categories were lumped into one



# Methodology

- Totaled all health expenditures into one category
- Due to aggregation, we have only 0.25% missing values
- First step: Estimation of OOP by applying survey weights
- Second Step: Estimated OOP is raised to actual population

- Estimated average and per capita OOP over the time (1998-99 to 2010-11) across time, regions and provinces
- Calculated poverty line (\$1.25) at each HH level and then calculated % of HH above and below the line

# RESULTS

# Total OOP Health Expenditure (Million Rupees)

Results

	1998-99	2001-02	2004-05	2005-06	2007-08	2010-11
Punjab	40,411	37,519	53,089	72,175	74,470	101,244
Sindh	16,486	19,040	19,831	23,164	24,809	30,366
KPK	8,880	9,900	15,259	21,230	23,011	33,464
Balochistan	2,162	2,224	3,381	2,744	3,266	4,186
Pakistan	67,702	69,060	91,620	119,491	126,018	169,877

# Per Capita OOP \$ Govt Expenditure (Rupees)

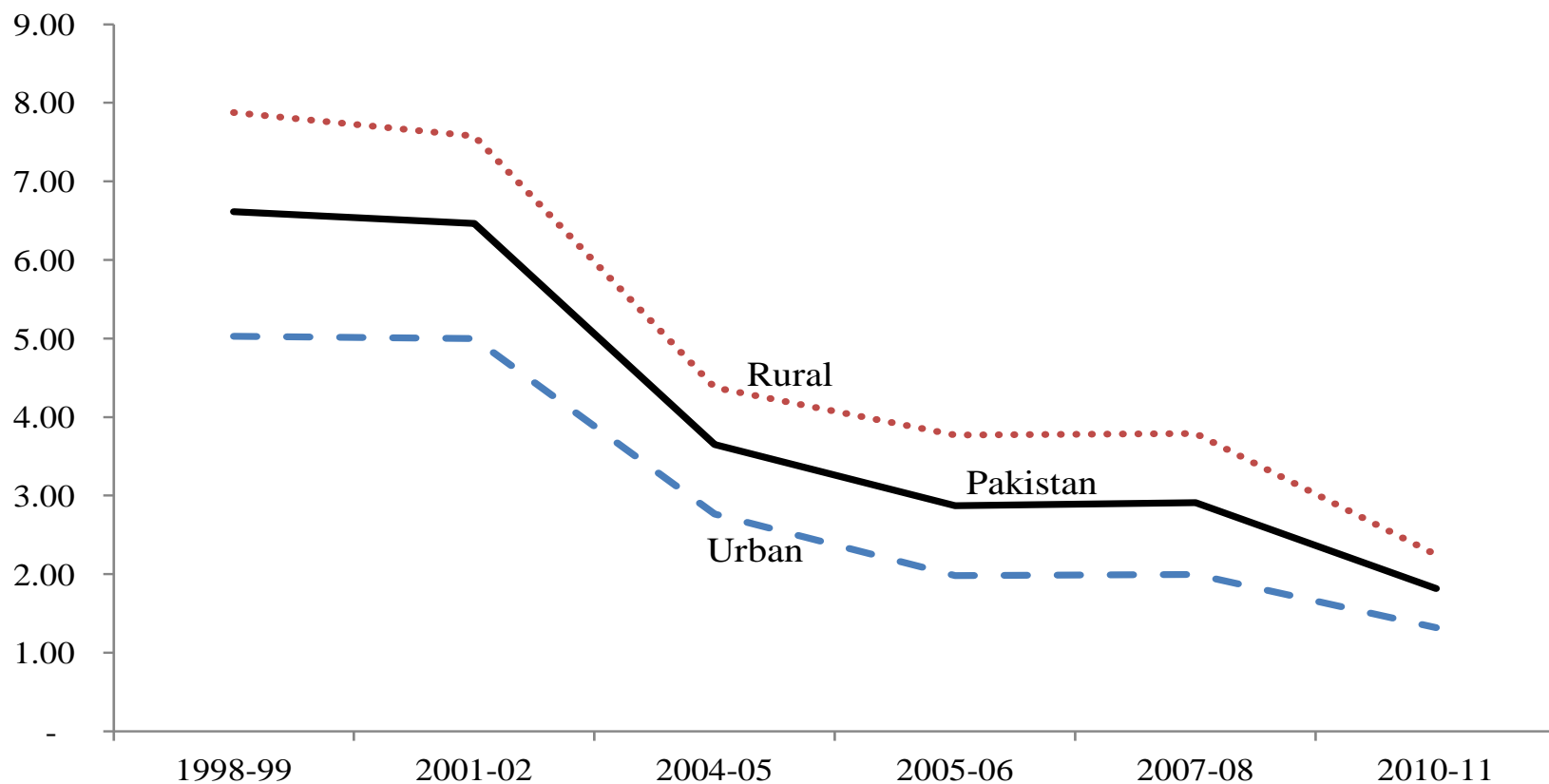
Results

	1998- 99	2001- 02	2004- 05	2005- 06	2007- 08	2010- 11
Punjab	544	471	624	830	822	1,054
Sindh	526	568	553	632	645	736
KPK	497	518	747	1,016	1,054	1,438
Balochistan	322	310	440	349	396	473
Pakistan	520	495	615	784	792	1,003
Government Spending	170	207	268	328	464	325
Share of OOP	75.41	70.56	69.61	70.50	63.07	75.50

# Share of OOP Health Expenditure to Income

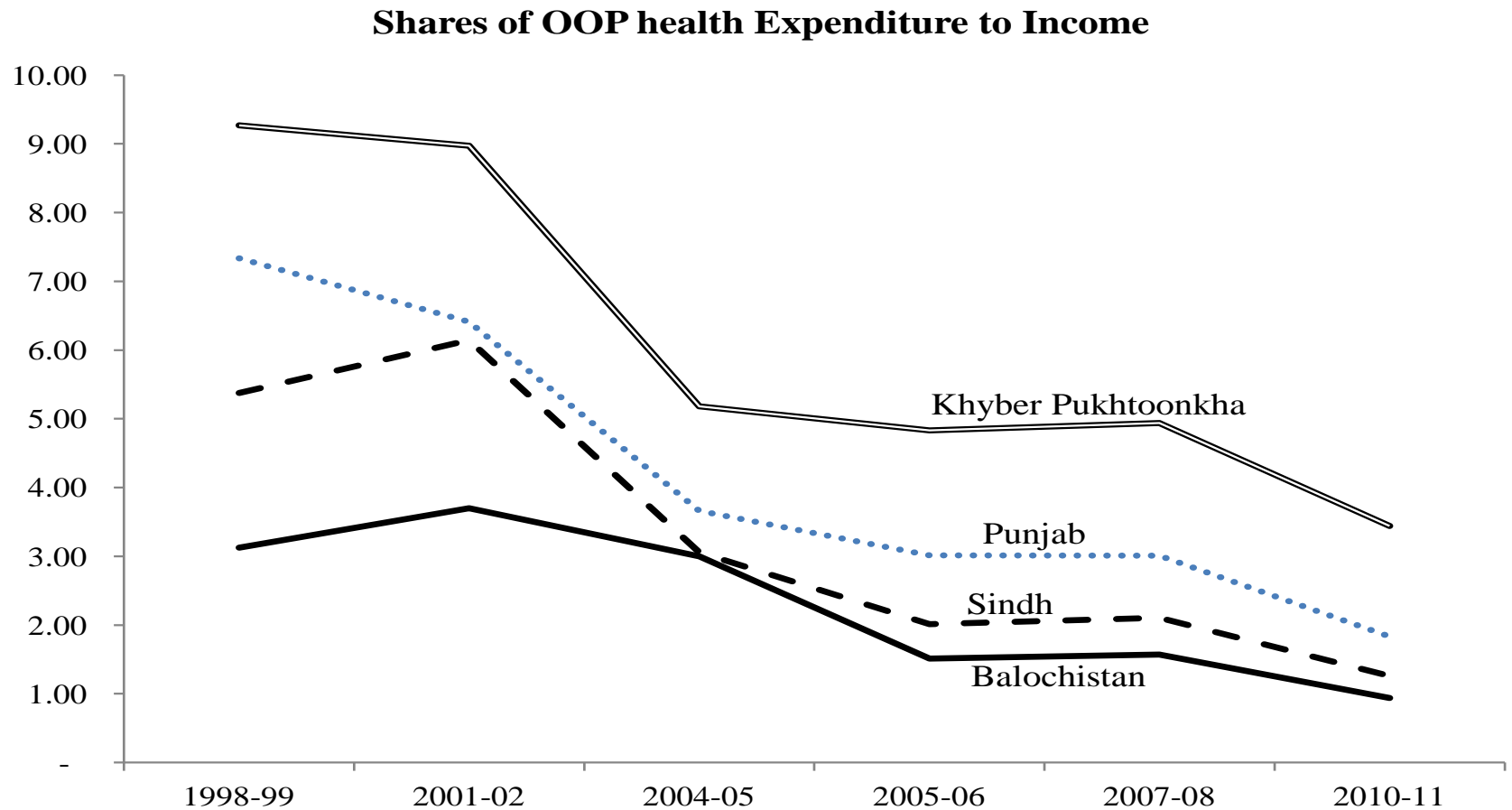
Results

**Shares of OOP health Expenditure to Income**



# Share of OOP Health Expenditure to Income

Results



# Weighted Average of OOP Health Expenditure

Results

		1998-99		2001-02		2004-05	
		Below	Above	Below	Above	Below	Above
Punjab	Rural	3,213	9,540	2,987	5,296	3,571	7,829
	Urban	3,197	10,273	3,155	5,149	3,542	5,930
	Total	3,209	10,086	3,033	5,189	3,563	6,757
Sindh	Rural	3,312	7,818	3,810	4,755	3,168	3,948
	Urban	3,411	4,893	4,131	9,767	3,583	5,690
	Total	3,353	5,499	3,933	9,111	3,311	5,390
KPK	Rural	3,542	10,554	3,837	5,405	5,190	10,878
	Urban	5,029	8,638	4,599	6,082	6,010	8,075
	Total	3,748	9,391	3,945	5,845	5,303	9,749
Balochistan	Rural	2,181	5,142	2,208	1,827	2,804	5,320
	Urban	3,142	4,410	3,212	2,220	3,075	3,862
	Total	2,291	4,996	2,370	1,982	2,848	4,620
Pakistan	Rural	3,216	8,423	3,240	4,893	3,686	7,562
	Urban	3,390	7,813	3,558	7,693	3,706	5,897
	Total	3,263	7,980	3,328	7,086	3,691	6,513



# Weighted Average of OOP Health Expenditure

Results

		2005-06		2007-08		2010-11	
		Below	Above	Below	Above	Below	Above
Punjab	Rural	4,967	6,235	5,192	5,233	5,280	7,363
	Urban	4,404	6,535	5,558	5,376	5,213	7,606
	Total	4,846	6,390	5,276	5,306	5,268	7,466
Sindh	Rural	3,929	5,217	4,319	4,559	4,267	5,211
	Urban	4,715	4,632	4,939	4,505	4,162	4,832
	Total	4,195	4,758	4,519	4,517	4,242	4,954
KPK	Rural	7,215	10,537	8,565	7,860	9,485	11,652
	Urban	5,894	14,226	8,410	7,772	8,607	10,766
	Total	7,044	11,563	8,543	7,833	9,380	11,445
Balochistan	Rural	2,437	3,007	2,527	3,302	2,990	3,284
	Urban	2,926	2,907	3,024	4,477	3,323	4,152
	Total	2,513	2,969	2,630	3,786	3,046	3,502
Pakistan	Rural	5,009	6,540	5,434	5,372	5,734	7,312
	Urban	4,575	5,985	5,511	5,107	5,236	6,577

# Discussion

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- HHs of KPK spend highest for OOP health expenditure
- This may due to higher literacy rate and income
- Urban HHs spent less on health as compared to rural
- This shows that in rural areas lack of health facilities pushed the people to spend more. The lack of health facilities and improper medical facilities may be a factor for high disease prevalence rates and health problems.

# Discussion

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- Total and per capita OOP by private HHs and Govt are increasing (indicating realization health importance)
- Contrary, Govt's health expenditure to GDP ratio is less than one percent (volatile & decreasing)
- OOP share, out of HHs is decreasing
- More health awareness is required for private households and government.

# Discussion

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- We could not find evidence for higher rural share within country but cross country results show that on average in low incomes countries OOP share is higher than richer countries
- Health needs often push households into selling their assets or borrow cash
- Catastrophic health expenditures can push vulnerable groups to poverty

# Conclusion

- Study analyzed OOP health expenditure patterns of Pakistan historically, across provinces, rural and urban areas and between below & above poverty line
- Absolute amount of OOP and government is increasing
- Spending shares out of income are declining, which should be major policy concern

# Conclusion

Cont ..

- The more rural health expenditure should also be policy dimension as most rural household already living under the absolute poverty and such expenditures will push them into further poverty trap.
- The disparity among the provinces is also another policy attention.
- Findings suggest a holistic health policy formulation in Pakistan.

THANK YOU VERY  
MUCH FOR PATIENT  
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