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Supplementary Table 1. List of 35 Included and 10 Excluded Countries

Countries Included in Main Analysis				Countries Excluded from Analysis
Middle-income	*Low-income*			
Kazakhstan	Ghana	China	Paraguay	Bosnia Herzegovina
Malaysia	India	Congo*	Philippines	Brazil
Mexico	Kenya	Cote d'Ivoire*	Senegal	Comoros
Russia	Laos	Dominican Republic	Sri Lanka	Guatemala
South Africa	Malawi	Ecuador	Swaziland*	Latvia
Uruguay	Mali*	Ethiopia*	Tunisia	Mauritius
	Mauritania	Georgia	Ukraine	Morocco
	Bangladesh	Myanmar	Vietnam	Nepal
	Burkina Faso*	Namibia	Zambia*	Turkey
	Chad*	Pakistan		Zimbabwe

*No individuals with diabetes in these countries possessed diabetes medications. Hence these 10 countries were dropped from the logistic regression of medical possession and health insurance.

To create the low- and middle-income per-capita GDP groups, countries were ordered in ascending per-capita GDP and added to the low-income group until the number of persons with diabetes in each group were approximately equal (low-income group 1,695 diabetic individuals; middle-income group 1,643 diabetic individuals).

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Supplementary Table 2. Characteristics of Persons With and Without Diabetes Included in the Analysis

Variable	Persons with Diabetes		Persons without Diabetes	
	Percent	SE	Percent	SE
Health insurance	28.8%	9.6%	16.6%	5.9%
Catastrophic medical spending*	16.2%	3.7%	13.9%	2.5%
Male	42.3%	4.5%	48.6%	1.5%
Urban	52.4%	10.8%	34.4%	7.7%
Current daily smoker	19.5%	6.0%	20.8%	3.4%
age 20-29	6.3%	1.3%	27.7%	1.0%
age 30-39	8.7%	1.0%	22.7%	0.4%
age 40-49	20.5%	3.6%	18.2%	0.8%
age 50-59	22.4%	1.8%	11.9%	0.3%
age 60 +	40.2%	2.9%	13.1%	0.7%
School < 1 yr	19.0%	6.0%	23.6%	6.1%
School 1-7 years	35.9%	4.2%	31.5%	3.9%
School 8-12 years	32.2%	8.7%	34.4%	6.0%
School 13+ years	12.9%	5.7%	10.5%	2.3%
	Mean	**SE**	**Mean**	**SE**
Total spending previous 4 weeks, per capita (2005 I$)	$133.9	$23.7	$83.3	$15.2
Medical spending, previous 4 weeks, per capita (2005 I$)	$12.8	$2.0	$7.0	$0.7
Age (years)	53.4	1.1	38.9	0.5

*Catastrophic spending exists when medical expenses exceed 40% of household's capacity to pay (18).
SE= Robust Standard Error

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Supplementary Table 3. Other Characteristics of WHS Respondents from 35 countries: Alternate Definitions of Catastrophic Medical Spending and Indicators of Permanent Income.

	Included in Main Analysis (N= 121,051)		All Responding to Given Question		
Medical expenses exceed X% of total household income	Percent	SE	N	Percent	SE
>10%	28.3%	4.5%	181,700	32.0%	4.0%
>15%	19.6%	3.3%	181,700	22.6%	3.0%
>20%	14.3%	2.4%	181,700	17.1%	2.4%
>25%	11.0%	2.0%	181,700	13.8%	2.1%
>30%	7.9%	1.4%	181,700	10.7%	2.0%
>35%	5.9%	1.0%	181,700	8.7%	1.9%
>40%	4.9%	0.9%	181,700	7.7%	2.0%
Indicators of permanent income	Percent	SE	N	Percent	SE
1 room	12.9%	1.8%	200,828	12.9%	1.9%
2-3 rooms	47.1%	2.3%	200,828	45.5%	2.0%
4-5 rooms	26.8%	1.9%	200,828	28.1%	2.3%
> 5 rooms	13.2%	1.4%	200,828	13.2%	1.1%
0 chairs	26.3%	7.3%	199,823	32.1%	7.0%
1 chair	8.7%	1.8%	199,823	9.5%	2.1%
2-3 chairs	17.7%	2.4%	199,823	16.4%	2.3%
> 3 chairs	47.4%	8.8%	199,823	42.0%	8.7%
0 tables	25.8%	9.3%	199,659	28.0%	9.3%
1 table	37.0%	4.8%	199,659	37.6%	5.0%
2-3 tables	30.6%	5.2%	199,659	28.2%	5.0%
> 3 tables	6.7%	1.3%	199,659	6.2%	1.3%
0 cars	84.2%	5.3%	179,314	85.1%	5.2%
1 car	14.3%	5.2%	179,314	13.3%	4.9%
2 cars	1.1%	0.4%	179,314	1.3%	0.5%
> 2 cars	0.3%	0.1%	179,314	0.4%	0.2%
Electricity	66.3%	5.1%	199,778	65.0%	5.0%
Bicycle	51.5%	5.9%	200,924	51.3%	6.5%
Clock	70.6%	5.9%	200,985	67.4%	7.7%
Bucket	80.0%	6.2%	200,978	77.2%	8.4%
Washing machine	21.9%	7.3%	200,790	23.9%	9.0%
Dishwasher	1.3%	0.4%	200,653	1.4%	0.4%
Refrigerator	29.2%	7.9%	200,833	30.1%	9.0%
Telephone line	22.1%	5.1%	200,731	25.8%	7.7%
Mobile phone	14.6%	4.2%	200,604	15.3%	5.1%
Television	49.0%	6.2%	200,870	45.8%	5.9%
Computer	6.0%	1.5%	200,277	6.3%	1.7%

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Supplementary Table 4. Predicted Difference in Probability of Catastrophic Spending Using Different Definitions.

The predicted difference in probability of catastrophic spending is the difference, for example, between the probability of catastrophic medical spending if all persons in the sample had diabetes minus the probability of the outcome if all persons in the sample did not have diabetes.

The same pattern of significance seen with all definitions (except 20%) was observed when catastrophic spending was defined as >35% and >40% of total spending (results Not shown).

Groups compared	Predicted Difference in Probability of Catastrophic Spending	95 % CI		Difference p<0.05
Catastrophic Spending defined as ≥ 40% Capacity to Pay				
Diabetics vs. Non-diabetics	3.9%	0.2%	7.7%	Yes
Insured vs. Uninsured	0.7%	-0.6%	2.0%	No
Among Non-Diabetics, Insured vs. Uninsured	0.7%	-0.6%	1.9%	No
Among Diabetics, Insured vs. Uninsured	0.8%	-7.3%	8.8%	No
Catastrophic Spending defined as ≥ 10% total spending on medical care				
Diabetics vs. Non-diabetics	5.2%	1.1%	9.3%	Yes
Insured vs. Uninsured	0.8%	-1.9%	3.6%	No
Among Non-Diabetics, Insured vs. Uninsured	0.8%	-1.9%	3.5%	No
Among Diabetics, Insured vs. Uninsured	1.3%	-8.0%	10.5%	No
Catastrophic Spending defined as ≥ 15% total spending on medical care				
Diabetics vs. Non-diabetics	3.8%	0.5%	7.0%	Yes
Insured vs. Uninsured	0.8%	-2.1%	3.6%	No
Among Non-Diabetics, Insured vs. Uninsured	0.8%	-1.9%	3.6%	No
Among Diabetics, Insured vs. Uninsured	-0.3%	-11.2%	10.5%	No
Catastrophic Spending defined as ≥ 20% total spending on medical care				
Diabetics vs. Non-diabetics	2.7%	-0.2%	5.6%	No
Insured vs. Uninsured	-0.6%	-3.5%	2.3%	No
Among Non-Diabetics, Insured vs. Uninsured	-0.6%	-3.5%	2.3%	No
Among Diabetics, Insured vs. Uninsured	-0.4%	-10.0%	9.3%	No
Catastrophic Spending defined as ≥ 25% total spending on medical care				
Diabetics vs. on-diabetics	3.4%	1.6%	5.2%	Yes
Insured vs. Uninsured	-0.3%	-2.7%	2.0%	No
Among Non-Diabetics, Insured vs. Uninsured	-0.4%	-2.7%	2.0%	No
Among Diabetics, Insured vs. Uninsured	-0.1%	-7.8%	7.5%	No

Catastrophic Spending defined as ≥ 30% total spending on medical care				
Diabetics vs. Non-diabetics	2.0%	0.5%	3.6%	Yes
Insured vs. Uninsured	0.1%	-1.2%	1.4%	No
Among Non-Diabetics, Insured vs. Uninsured	0.2%	-1.1%	1.4%	No
Among Diabetics, Insured vs. Uninsured	-0.8%	-7.1%	5.5%	No

Supplementary Table 5. Predicted Prevalence of Catastrophic Spending and Medication Possession, Stratified by per-capita GDP and Geographic Region.

	Without diabetes	With Diabetes	Difference (p-value)	Without Insurance	With Insurance	Difference (p-value)
Low-income per-capita GDP	15.4%	21.4%	5.9% (p=0.005)	15.5%	16.2%	ns (p=0.496)
Middle-income per-capita GDP	7.6%	6.7%	ns (p=0.691)	8.1%	7.1%	-1% (p=0.025)
Africa Region*	8.3%	8.4%	ns (p=0.971)	8.4%	7.3%	ns (p=0.419)
Asia Region	16.1%	23.3%	7.2% (p=0.002)	16.2%	18.2%	ns (p=0.071)
Europe/Latin America Region	10.9%	11.6%	ns (p=0.661)	11.7%	10.2%	-1.5% (p=0.000)
	Predicted Prevalence of Possession of Medications to Treat Diabetes					
	Without Insurance	**With Insurance**	**Difference (p=value)**			
Low-income per-capita GDP	22.2%	22.9%	ns (p=0.852)			
Middle-income per-capita GDP	16.5%	23.1%	6.6% (p=0.011)			
Africa Region*	--	--	--			
Asia Region	21.0%	17.5%	ns (p=0.463)			

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Europe/Latin America Region	18.5%	27.2%	9.0% (p=0.000)			

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Supplementary Table 6. Sensitivity Analysis: Predicted Difference in Catastrophic Spending, Removing One Country at a Time.

Country Removed	Predicted difference, Diabetes vs. No Diabetes	p value	Predicted difference, Insurance vs. no insurance	p value	Number of observations per country
Full analysis	3.9%	0.041	0.7%	0.294	
Burkina Faso	3.9%	0.042	0.7%	0.291	4,151
Bangladesh	4.3%	0.029	0.6%	0.343	2,404
China	3.8%	0.048	0.7%	0.286	3,669
Cote d'Ivoire	3.9%	0.045	0.8%	0.249	1,985
Congo	3.9%	0.041	0.7%	0.294	907
Dominican R.	3.9%	0.049	0.7%	0.278	3,734
Ecuador	4.1%	0.035	0.8%	0.246	1,065
Ethiopia	3.9%	0.05	0.7%	0.312	2,722
Georgia	3.9%	0.042	0.7%	0.295	281
Ghana	3.9%	0.047	0.7%	0.278	2,855
India	2.2%	0.117	0.6%	0.414	5,075
Kazakhstan	3.8%	0.048	0.7%	0.275	1,568
Kenya	3.9%	0.043	0.8%	0.23	3,737
Laos	3.9%	0.043	0.7%	0.298	4,339
Sri Lanka	3.8%	0.051	0.6%	0.366	3,000
Mexico	4.2%	0.06	0.7%	0.468	23,320
Mali	3.9%	0.042	0.7%	0.262	1,301
Myanmar	3.9%	0.049	0.7%	0.318	5,861
Mauritania	3.9%	0.042	0.7%	0.291	1,808
Malawi	3.9%	0.042	0.7%	0.3	4,703
Malaysia	4.0%	0.039	0.7%	0.304	2,699
Namibia	3.9%	0.041	0.7%	0.305	2,801
Pakistan	4.3%	0.036	0.4%	0.506	3,809
Philippines	3.2%	0.124	0.0%	0.998	9,110
Paraguay	4.0%	0.041	0.7%	0.303	4,898
Russia	4.4%	0.024	0.8%	0.237	1,094
Senegal	3.9%	0.041	0.7%	0.292	1,172
Swaziland	3.9%	0.041	0.7%	0.294	375
Chad	3.9%	0.042	0.7%	0.295	2,415
Tunisia	3.9%	0.044	0.9%	0.135	4,212
Ukraine	4.3%	0.029	0.8%	0.223	869

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Uruguay	3.9%	0.041	0.7%	0.304	1,924
Vietnam	4.0%	0.043	0.8%	0.341	2,491
South Africa	4.5%	0.016	0.7%	0.331	1,308
Zambia	4.0%	0.042	0.7%	0.277	3,389

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Supplementary Table 7. Sensitivity Analysis: Predicted Difference in Possessing Diabetes Medications, Removing One Country at a Time

Country Removed	Predicted difference, Insurance versus no insurance	p-value
Full analysis	2.2%	0.470
Bangladesh	2.5%	0.407
China	1.9%	0.531
Dominican R.	2.0%	0.514
Ecuador	2.4%	0.411
Georgia	2.2%	0.473
Ghana	2.2%	0.459
India	3.5%	0.292
Kazakhstan	2.3%	0.421
Kenya	1.8%	0.557
Laos	2.2%	0.468
Sri Lanka	2.4%	0.428
Mexico	-1.7%	0.482
Myanmar	2.1%	0.494
Malaysia	3.2%	0.227
Namibia	2.2%	0.471
Pakistan	2.3%	0.462
Philippines	2.2%	0.557
Paraguay	2.3%	0.454
Russia	0.9%	0.747
Tunisia	2.4%	0.438
Ukraine	2.0%	0.459
Uruguay	2.0%	0.501
Vietnam	2.4%	0.410
South Africa	3.0%	0.331