Health Care Delivery in Rural Rajasthan

This paper reports on a survey conducted in rural Udaipur to gauge the delivery of health care and the impact it has on the health status of the largely poor population of the region. The study shows that the quality of public service is extremely low and that unqualified private providers account for the bulk of health care provision. The low quality of public facilities has also had an adverse influence on the people's health. In an environment where people's expectations of health care providers seem to be generally low, the state has to take up the task of being the provider or regulator.

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I Introduction

There is surprisingly little information about the delivery of health care in rural India, and about the relationship, if any, between health care and health status. Some sources, such as the Commission on Macroeconomics and Health of the World Health Organisation (2001), have argued that better health care is the key to improving health as well as economic growth in poor countries, but there is little systematic evidence that gives us a sense of how easy it is to influence the quality of health care delivery in developing countries and, through these improvements, which the health of the population. This paper, reports on a recent survey in a poor rural area Rajasthan, is intended to shed some light on this issue. We use a set of interlocking surveys to collect data on health and economic status, as well as the public and private provision of health care.

The existing evidence suggests that there is an extensive system of health care delivery which is, however, quite dysfunctional in many ways, making reform of the system something of a challenge. A recently completed survey of absenteeism in public health facilities in several Indian states [Chaudhury et al 2003] suggests a very high level of absence (43 per cent) of health care providers in public primary health care centres; a survey of private providers in Delhi [Das 2001] showed that 41 per cent of the providers are unqualified. Sen et al (2002) used two NSS surveys, separated by almost a decade (1986-87 and 1995-96), to study the relationship between income and access to health care, and showed a worsening of inequalities in access to health care. This paper confirms these patterns, and delves deeper into these phenomena and their relationships with health status.

II Udaipur Rural Health Survey

The data collection took place between January 2002 and August 2003 in 100 hamlets of Udaipur district. Udaipur is one of the poorest districts in India, with a large tribal population and an unusually high level of female illiteracy (at the time of the 1991 census, only 5 per cent of women were literate in rural Udaipur). The survey was conducted in collaboration with two local institutions, namely, Seva Mandir, an NGO that works, among other things, on health in rural Udaipur, and Vidhya Bhavan, a consortium of schools, teaching colleges and agricultural colleges, which supervised the administration of the survey.

The sample frame consisted of all the hamlets in the 362 villages where Seva Mandir operates in at least one hamlet.[1] This implies that the sample is representative only of the population served by Seva Mandir, not of rural Udaipur district as a whole. Seva Mandir tends to operate in poorer villages with a larger tribal population. This sample frame presents several important advantages, however. It represents a population of interest to this paper – households in India that are among the most likely to be underserved by the health care system. Seva Mandir's relation with the villages ensured collaboration with the survey, and allowed us to collect very detailed information at the village and household level. Seva Mandir's long-standing relationship with the health authorities also gained us their full collaboration, making possible a weekly survey of all public health facilities. Finally, the extensive network of Seva Mandir's staff in the district allowed us to hire 130 reliable employees, and will make it possible for us to implement and evaluate potential health interventions in the future. The sample was stratified according to access to a road (of the 100 hamlets, 50 are at least 500 metres away from a road). Hamlets within each stratum were selected randomly, with a probability of being selected proportional to the hamlet population.

The data collection has four components: a village survey, where we obtained its census, a description of physical infrastructure of the village, and a list of health facilities commonly used by villagers (100 villages); a facility survey, where we collected detailed information on activities, types and cost of treatment, referrals, availability of medication and quality of physical infrastructure in all public facilities (143 facilities) serving the sample villages, all 'modern' private facilities mentioned in the village surveys or in the household interviews (we have surveyed 85 facilities so far, but this survey is still going on, in order to cover all private facilities mentioned by our respondents), and a sample of the traditional healers mentioned in the village surveys (225 traditional healers were surveyed); a weekly visit to all public facilities serving the villages (143 facilities in total, with 49 visits per facility on average); and a household and individual survey, covering 5,759 individuals in 1,024 households.

The data collected in the household survey includes information on economic well-being using an abbreviated consumption questionnaire previously used by the National Sample Survey in its 1999-2000 survey (55th round), measures of integration in society, education, fertility history, perception of health and subjective well-being, and experience with the health system (public and private), as well as a small array of direct measures

of health (haemoglobin, body temperature, blood pressure, weight and height, and a peak flow meter measurement of lung capacity).

The continuous facility survey (CFS) may be the most original part of the project. We identified all the public facilities (143) serving the sample villages, and hired one para-worker living close to each facility, who was given the responsibility of checking the facility every week. The para-worker pays an unannounced visit to the facility during opening hours, checks whether the facility is open, and counts the number of doctors, nurses, other medical and non-medical personnel, as well as clients present at the facility. If the facility is closed because the staff is performing a scheduled village visit, the para-worker goes to the village that the staff is supposed to be visiting, and checks whether he or she can be found in that village. To ensure the quality of data collected in the continuous facility survey, we have put in place a strictly enforced monitoring system – every four weeks all the CFS para-workers of a block met, and we collected their data entry forms. They were also given a schedule indicating on which day they must complete their visit in each week of the following month. Two members of the team of investigators used motorcycle transport to visit several facilities every day, following the schedule given to the CFS para-worker. The para-workers were paid only if their visits have been completed on the planned day, and if there were no unexplained discrepancies between their report and that of the CFS monitor. The CFS monitors also visited the facilities on different days, so that we could check that there was no collusion between the para-worker and the facility staff. This survey took place for 13 to 14 months, including a 'pilot period' of one to two months in each facility, where the system was fine-tuned. We report data for 12 months for each facility. The survey is complemented by a detailed one-time facility survey, which, among other things, will allow us to identify correlates of absenteeism in the centres.

Table 1: Selected Health Indicators, by Position in Income Distribution

Group	Self-Reported	No of Symptoms in Last 30 Days	BMI	Haemoglobin below 12 g/dl	Peak Flow Meter Reading	High Blood Pressure	Low Blood Pressure
Bottom third	5.87	3.89	17.85	0.57	314.76	0.17	0.06
Middle third	5.98	3.73	17.83	0.59	317.67	0.15	0.08
Top third	6.03	3.96	18.31	0.51	316.39	0.20	0.09

Table 2: Frequency of Health Care Visits

	Per Capita Monthly Expenditure (Rs)	Total Number of Visits in the Last 30 Days: All	Public	Private	Bhopa
Panel A: Means					
All	470	0.51	0.12	0.28	0.11
Poor	219	0.43	0.09	0.22	0.12
Middle	361	0.54	0.11	0.29	0.13
Rich	770	0.55	0.15	0.33	0.07
Panel B:OLS Regressions: Dependent Variable: Number of Visits					
Middle		0.11	0.02	0.07	0.01
		(.052)	(.023)	(.034)	(.027)
Rich		0.12	0.06	0.11	-0.05
		(.05)	(.024)	(.034)	(.022)
Panel C: OLS Regressions, with Village Fixed Effects					
Middle		0.14	0.02	0.09	0.02
		(.047)	(.024)	(.033)	(.023)
Rich		0.13	0.04	0.11	-0.03
		(.05)	(.026)	(.036)	(.025)
Villages Fixed effects		yes	yes	yes	yes

Note: Omitted dummies in panel B and C: poor; Standard errors in parentheses below the coefficients.

III
Health Status

The households in the Udaipur survey are poor, even by the standards of rural Rajasthan. Their average per capita household expenditure (PCE) is Rs 470, and more than 40 per cent of the people live in households below the official poverty line, compared with only 13 per cent in rural Rajasthan in the latest official counts for 1999-2000. Only 46 per cent of adult males (14 year and older) and 11 per cent of adult females report themselves literate. Of the 27 per cent of adults with any education, three-quarters completed standard eight or less. These households have little in the way of durable goods and only 21 per cent of households have electricity.

In terms of measures of health, 80 per cent of adult women and 27 per cent of the adult men have haemoglobin levels below 12 grams per decilitres. Five per cent of adult women and 1 per

Table 3: Expenditure on Health Visits

	Household Monthly Health Expenditure Level: Expenditure Survey	Individual Surveys	Individual Surveys Share/Monthly Exp	Average Adult Monthly Expenditure on: All Visits	Share Public	Share Private	Share Bhopa	Average Cost Per Visit: All Visits	Public	Private	Bhopa
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Panel A: Means											
All	286	196	0.07	59	0.18	0.66	0.15	117	113	144	74
Poor	70	99	0.07	32	0.13	0.61	0.24	72	71	84	61
Middle	162	195	0.09	52	0.14	0.68	0.17	95	52	130	76
Rich	571	286	0.08	88	0.23	0.68	0.09	166	173	191	90
Panel B: OLS Regression											
Middle	92	96	0.02	19	0.01	0.07	-0.07	23	-19	46	16
	(21)	(38)	(.018)	(8)	(.042)	(.051)	(.041)	(12)	(24)	(20)	(31)
Rich	500	187	0.01	55	0.10	0.07	-0.16	94	102	107	29
	(109)	(34)	(.012)	(12)	(.042)	(.053)	(.041)	(24)	(45)	(35)	(34)
Panel C: OLS Regressions, with Village Fixed Effects											
Middle	92	63	0.02	16	0.01	0.08	-0.07	5.7	-33	0.46	-7.9
	(21)	(39)	(.015)	(12)	(.04)	(.049)	(.039)	(26)	(78)	(42)	(36)
Rich	500	135	0.01	43	0.05	0.07	-0.10	76	-21	73	81
	(109)	(42)	(.016)	(13)	(.042)	(.052)	(.041)	(28)	(86)	(43)	(49)
Village Fixed Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	

cent of adult men have haemoglobin levels below 8 grams per decilitres. Strikingly, using a standard cut-off for anemia (11 g/dl for women, and 13 g/dl for men), men are almost as likely (51per cent) to be anaemic as women (56 per cent) and older women are not less anaemic than younger ones, suggesting that diet is a key factor. The average body mass index is 17.8 among adult men, and 18.1 among adult women. Ninety-three per cent of adult men and 88 per cent of adult women have BMI less than 21, considered to be the cut-off for low nutrition in the US [Fogel 1997]. We also used peak-flow meter measurement to measure lung capacity in an attempt to detect asthma or other respiratory disorders such as (chronic bronchitis). Among adults, the average peak-flow meter measurement is 316 ml per expiration (anything below 350 ml for an adult 1.60 metres tall is considered to be an indicator of respiratory difficulties).

Symptoms of disease are widespread, and adults (self) report a wide range of symptoms; one-third report cold symptoms in the past 30 days, and 12 per cent say the condition was serious. 33 per cent reported fever (14 per cent serious), 42 per cent (20 serious) reported 'bodyache', 23 per cent (7 serious) per cent reported fatigue, 14 (3 serious) per cent problems with vision, 42 (15) per cent headaches, 33 (10) per cent backaches, 23 (9) per cent upper abdominal pain, 11 (4) per cent had chest pains, and 11 (2) per cent had experienced weight loss. Few people reported difficulties in taking care of themselves, such as bathing, dressing, or eating, but many reported difficulty with the physical activities that are required to earn a living in agriculture. Thirty per cent or more would have difficulty walking 5 km, drawing water from a well, or working unaided in the fields. Eighteen to twenty per cent have difficulty squatting or standing up from a sitting position.

In Table 1, we show the number of symptoms reported in the last 30 days, body mass index, fraction of individuals with haemoglobin count below 12, peak-flow meter reading, high blood pressure, low blood pressure, broken down by third of the distribution of monthly per capita expenditure, which we collected using the abbreviated consumption questionnaire. Individuals in the lower third of the per capita income distribution have, on average, a lower body mass index, lower lung capacity, and are more likely to have a haemoglobin count below 12 than those in the upper third. Individuals in the upper third report the most symptoms over the last 30 days, perhaps because they are more aware of their own health status; there is a long tradition in Indian and developing-country literature of better-off people reporting more sickness [Murray and Chen 1992, Sen 2002].

Yet, when asked to report their own health status, shown a ladder with 10 rungs, 62 per cent placed themselves on rungs five through eight (more is better), and less than 7 per cent place themselves on one of the bottom two rungs. Unsurprisingly, old people report worse health, and women at all ages also consistently report worse health than men, which appears to be a worldwide phenomenon [Sadana et al 2002] and richer people report better health than poorer people, but most people report themselves close to the middle. Nor do our life-satisfaction measures show any great dissatisfaction with life: on a five point scale, 46 per cent take the middle value, and only 9 per cent say their life makes them generally unhappy. Such results are similar to those for rich countries; for example, in the US, more than half of the respondents report themselves as a three (quite happy) on a four-point scale, and 8.5 per cent report themselves as unhappy or very unhappy. These people are presumably adapted to the sickness that they experience, in that they do not see themselves as particularly unhealthy nor, in consequence, unhappy. Yet they are not so adapted in their reports of their financial status, which was also self-reported on a 10-rung ladder. Here the modal response was the bottom rung, and more than 70 per cent of the people live in households that are self-reported as living on the bottom three rungs.

IV
Patterns of Health Care Use

In the household survey we also asked where people go to get health care. Table 2 shows these results. We see that adults visit a health facility on average 0.51 times a month. The poor, defined here as people who are in households in the bottom third of the distribution of PCE (average Rs 219) per month, visit a facility 0.43 times in a month, while an adult in the middle third of the distribution (average PCE Rs 361) visits a facility 0.54 times a

Table 4: Continuous Facility Survey – Summary Statistics

Factor	Subcentres and Aid Posts	PHC and CHC
Doors closed	0.56	0.03
No personnel found	0.45	0.03
Fraction of medical personnel found	0.55	0.64
Doctor is appointed	0	0.89
Fraction of doctors present	—	0.55
At least one medical personnel is missing	0.56	0.78
Observations	5268	1716
Number of facilities	108	35
Number of visits per facility	49	49

Table 5: Absenteeism by Types of Facilities

	Number of Visits	Fraction of Medical Personnel Present: Subcentres and Aid Posts	Fraction of Medical Personnel Present: PHC and CHC
Distance from road			
0 Km from road	5103	0.56	0.65
>0 and <=5 km from road	1478	0.55	0.63
>5 km from road	403	0.38	
Distance from Udaipur			
Closest to Udaipur	2315	0.53	0.61
Farther	2254	0.58	0.68
Farthest	2415	0.54	0.66
Distance from the nearest town			
Closest to town	2350	0.56	0.64
Farther	2396	0.55	0.75
Farthest	2238	0.54	0.59
Reservations for women			
No reservation for women	2583	0.57	0.50
Reservation for women	1843	0.56	0.68
Electricity			
No electricity	3123	0.56	0.60
electricity	1564	0.52	0.65
Water			
In facility	757	0.53	0.61
Less than 30 metres from facility	2365	0.57	0.68
30 to 100 metres from facility	794	0.49	0.62
More than 100 metres from facility	771	0.59	0.62
Medical personnel living in facility			
No medical personnel living in facility (with living quarters)	2640	0.56	0.80
At least one medical personnel living in facility	853	0.64	0.69
No living quarters available	3171	0.49	0.64

Note: Some data covers only a subset of facilities.

month and an adult in the highest group (average PCE Rs 770) visits the facility 0.55 times a month. The difference between the top third and the middle third, on the one hand, and the bottom third on the other, is significant, and remains so with village fixed effects. Of these 0.51 visits, only 0.12 visits (less than a quarter) are to a public facility. The fraction of visits to a public facility is highest for the richest group, and lower for the other two groups, but about the same for each. Overall, the rich have significantly more visits to a public facility than the poor. No one uses public facilities very much, and if anything, the poor use them less than the non-poor.

The majority of the rest of the visits (0.28 visits per adult per month) are to private facilities. The rest are to 'bhopas' (0.11 visits per adult per month), who are traditional healers. For the poor, the fraction of visits to a bhopa is well over a quarter of all visits, while for the richest group it is about an eighth of all visits.

In terms of expenditure, columns 1 and 2 of Table 3 show the monthly expenditure on health, calculated in two ways, namely, from the expenditure survey, and from the expenditures reported in the adult and children survey. The numbers are similar, except for the rich where the expenditure derived from the expenditure survey is much larger than that calculated from the addition of last month's visit. Column 3 shows the expenditure as a fraction of household total expenditures, and from the expenditures reported in the adult and children survey, as a fraction of personal expenditures. The average household spends 7 per cent of its budget on health. While the poor spend less in absolute amounts, they spend the same amount as a share of their budget. Column 4 shows the average health expenditure for adults. It is about Rs 60 rupees, or 13 per cent of the monthly PCE of the family. This fraction is highest for the poorest (15 per cent) and lowest for the richest group (11 per cent). Poor adults spend 13 per cent of their total health expenditure at public facilities, 23 per cent on bhopas, and the rest at private facilities. The rich spend 23 per cent of their total health expenditures at public facilities, and less than 10 per cent on bhopas, while the middle group spends more than 17 per cent of their health expenditures on bhopas and 13 per cent at public facilities.[2] The rich, therefore, spend a significantly larger fraction of their health expenditure on public facilities than do the poor, and a significantly smaller fraction on bhopas. Part of the difference in the consumption of public health care can be attributed to where the rich live, since, once we control for village fixed effects, the difference is smaller (5 per cent) and insignificant.

V
Public Health Care Facilities

Official policy provides for one subcentre, staffed by one trained nurse (ANM), for every 3,000 individuals. Subcentres and primary health centres (PHCs) or community health centres (CHCs), which are larger than PHCs, are supposed to be open six days a week, six hours a day. In principle, the system is intended to provide more or less free and accessible health care to anyone who chooses to use the public health care system, with the sub-centres, staffed by a trained nurse (ANM) providing the first point of care, the PHCs or CHCs the next step, and the referral hospitals dealing with the most serious health problems. In our data, each subcentre serves 3,600 individuals on average, and is usually staffed by one nurse. A primary health centre serves 48,000 individuals and has on average 5.8 appointed medical personnel, including 1.5 doctors.

Why then do we see people not making use of the public health system and relying on private health care and bhopas? This is a population where almost no one is really rich and the poor, who are just as reluctant to use the public system as anyone else, are actually extremely poor.

In part, the answer must lie in the way the public system actually works. Public health facilities were surveyed weekly, and we have on average 49 observations per facility. Table 4 summarises the

Table 7: Private Doctor's Qualifications

Fraction of Doctors Who Have	
Not graduated from class 10	0.08
Not graduated from class 12	0.17
No medical or paramedical training	0.18
No college diploma	0.42
No college degree as doctor	0.41
No medical training whatsoever	0.82
Observations	72

Table 6: Pattern in Opening of Centre

	Dependent Variable: Fraction of Medical Personnel Present					
	Subcentres and Aid Posts			PHC and CHC		
A *F statistics*						
Facility dummies	6.16	6.13	5.62	17.51	16.77	17.12
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Day of visits dummies	no	1.99	no	no	1.49	no
		(0.09)			(0.2)	
Facility dummies* day	no	1.17	no	no	1.06	no
		(0.01)			(0.3)	
Time of visit dummies	no	no	5.35	no	no	9.57
			(0.02)			(0.00)
Facility dummies* time of visit	no	no	1.19	no	no	1.91
			(0.05)			(0.00)
Adjusted R2	0.12	0.13	0.13	0.21	0.22	0.23
Observations	6342	6342	6327	2078	2078	2074
B *Fraction of facility level regressions where the dummies are jointly significant*						
Day of visit dummies	0.095			0.000		
Time of the day dummies	0.086			0.171		

Notes: 1 Panel A report F statistics and p value for the joint hypothesis that the dummies are significant in a regression where the dependent variable is the fraction of personnel present on the day of the visit.

2 Panel B reports the results from running a separate regression for each facility, where the dependent variable is the fraction of personnel present on the day of the visit, and the explanatory variables are day of the visit dummies, time of the visit dummies, and season dummies.

main results. It conveys the impression that things are not working the way they are supposed to. On average, 45 per cent of the medical personnel are absent in subcentres and aid posts, and 36 per cent are absent in the (larger) PHCs and CHCs. These high rates of absence are not due to staff outreach activities, since, whenever the nurse was absent from a subcentre, we made sure to look for her in the community. Since subcentres are often staffed by only one nurse, this high absenteeism means that these facilities are often closed: we found the subcentres closed 56 per cent of the time during regular opening hours. Only in 12 per cent of the cases was the nurse to be found in the catchment area of her subcentre. The situation does not seem to be specific to Udaipur: these results are similar to the absenteeism rate found in nationally representative surveys in India (where absenteeism in PHCs was found to be 43 per cent) and Bangladesh (where it was found to be 35 per cent) [Chaudhury et al 2003, Chaudhury and Hammer 2003].

Table 5 reports results on the kinds of facilities we are most likely to find closed. The 6 per cent of subcentres that are far from the road have only 38 per cent of the personnel present, compared with about 55 per cent on the average. Facilities that are closer to Udaipur or to another town do not have lower absenteeism. The available amenities (water, electricity) do not seem to have a large impact, except for the presence of living quarters, which has a large impact on the fraction of personnel present, particularly in subcentres. Reservation of the position of chairperson (sarpanch) of the panchayat to a woman has no impact on subcentres, and seem to be associated with increased presence in PHCs.

The weekly survey allows us to assess whether there is any predictability in the fraction of staff present at a centre or subcentre. Table 6 shows a regression of the fraction of missing personnel on facility dummies (columns to 1 to 3), day of the visit dummy, day of the visit interacted with facilities dummies (in column 2) and time of the visit dummy, interacted with facility dummies (column 3). The facility dummies are strongly significant, with F statistics of 6.16 for the subcentres, and 17.5 for the PHC and CHC. There are clearly better and worst facilities. However, the Fstatistics for the interaction between day of the week and the time of the day and the facility dummies are much smaller. For each centre, we ran a regression of the fraction of personnel missing on dummies for each day of the week, time of the day, and seasonal dummies. We find that the day of the week dummies are significant at the 5 per cent level in only 10 per cent of the regressions for the subcentres, and in none of the regression for the PHC and CHC; the time of day dummies are significant only in 17 per cent of the regressions for the PHC, and 9 per cent for the subcentres. The public facilities are thus open infrequently and unpredictably, leaving people to guess whether it is worth their while walking for over half an hour to cover the 1.4 miles that separate the average village in our sample from the closest public health facility. Indeed, the probability that a centre is open more often is correlated with lower utilisation of these facilities: in random visits, we find that, on open days, public facilities where the personnel are present more often have significantly more patients than those where the personnel are present less often. In the household survey, we find that in villages that are served by a facility that is closed more often, the poor (though not the middle class or the rich) are less likely to visit the public facilities, and are more likely to visit the bhopa. Of course, the causality could be running either way; from utilisation to presence of the personnel, or from presence of the personnel to utilisation.

Visits to the public health facilities are therefore often frustrating; they are also not cheap. Columns (1) to (3) in Table 3 list the expenditure per visit. For the poor, each visit to a public facility costs Rs 71, compared with Rs 84 for visiting a private doctor and Rs 61 for going to the bhopa. In other words, visits to the public facilities are not much cheaper than going to the private doctor, who, moreover, is probably easier to find. The gap is larger for the middle group, who actually spend less per visit to a public facility in absolute terms than the poor (although the difference is not significant) and about 50 per cent more per visit to a private facility, but about the same size again (in proportional terms) for the rich. The larger expenditure per visit for the rich disappears completely when village fixed effects are allowed for, and is likely attributable, as before, to the location of the rich relative to the poor.[3]

Given that public facilities are meant to be free, why do they cost about as much as private facilities? It is true that lab tests are not free but only 4 per cent of all visits lead to lab tests. A more plausible explanation is that, in practice, the public facilities do not always provide free medicines. The government stipulates that medicine must be supplied for free as long as they are available, but that when the medicine is not available, it needs to be purchased from the market. Another possibility is to purchase the medicine from the private stock of the health provider at the

public facility, and there is evidence of this in our data, since we often observe people paying for medicine purchased inside the facility. Even a scheme to help those who are officially designated as 'below the poverty line', to avoid even these costs (the doctor or nurse is supposed to purchase medicines for them) does not appear to adequately cover the poor: they too end up paying only 40 per cent less in public facilities than others.

It is also possible that the public health official charges for his services. This is not necessarily illegal, since they are allowed to practise outside office hours, and it is possible that our respondents are not always making a distinction between what the public official does during office hours and what he does after hours. The fact remains, however, that they are not getting free health care at the public facilities.

VI
Private Health Care Facilities

The main sources of health care in the system are the private practitioners. The public health professionals are required to be qualified and there are precise rules about what they can and cannot treat (ANMs are not allowed to treat malaria for example). By comparison, the private sector is often untrained and largely unregulated, even if we exclude the bhopas. We have conducted a survey of all the private facilities mentioned in the village, level interview, asking them about their qualifications, the types of diseases they treated, and the types of treatment they used.[4] Table 7 presents private doctors' self-reported qualification. According to their own report, 41 per cent of those who called themselves 'doctors' do not have a medical college degree, 18 per cent have no medical or paramedical training whatever (including one-week courses), 17 per cent have not graduated from high school.[5] Given the symptoms reported by villagers, the treatment that they report receiving in these facilities appears rather heterodox: in 68 per cent of the visits to a private facility the patient is given an injection; in 12 per cent of the visits he or she is given a drip. A test is performed in only 3 per cent of the visits. In public facilities, they are somewhat less likely to get an injection or a drip (32 per cent and 6 per cent respectively) but no more likely to be tested. Among private doctors, in this sample, it does not appear that more qualified doctors are less likely to administer shots: if anything, it seems to be the opposite.

VII
Conclusion

The picture painted by our data is bleak: villagers' health is poor despite the fact that they heavily use health care facilities and spend a lot on health care. The quality of the public service is abysmal and unregulated and private providers who are often unqualified provide the bulk of health care in the area. Low-quality public facilities also seem to be correlated with worse health: controlling for age, gender, distance from a road, and per capita monthly expenditures, lung capacity and body mass index are lower where the facilities are worse.

Yet, as we have already seen, villagers seem pretty content with what they are getting; 81 per cent report that their last visit to a private facility made them feel better, and 75 per cent report that their last visit to a public facility made them feel better. Self reported health and well-being measures, as well as the number of symptoms reported in the last month appear to be uncorrelated with the quality of public facilities. The quality of health services may affect health but does not seem to influence people's perception of their own health or the health care they are getting, perhaps because they have come to expect very little. Improving the quality of health care in an environment where the clients themselves are not particularly interested in complaining about what they are getting, will not be easy. The onus will have to be completely with the state, either in its capacity as a direct provider or as a regulator, and it is not clear that it is particularly well-prepared for this additional burden. EPW

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Notes

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1 A hamlet is a set of houses that are close together, share a community centre and constitutes a separate entity. A village is an administrative boundary. One to 15 hamlets constitute a village (the mean number of hamlets in a village is 5.6). Seva Mandir in general operates in the poorest hamlets within a given village.

2 The percentages do not necessarily add up to 100, because some people did not know whether some facilities were public or private.

3 The large difference in the cost of public visits between the top third and the rest of the population is due to some extent to a few large expenses (in excess of Rs 800), that never occur in the rest of the sample. But even when we do not include these 5 large data point, the average expenditure of the rich at each visit is still Rs 95, substantially more than for the other categories.

4 We are currently collecting data on all doctors mentioned in the household level interviews.

5 These statistics are based on a partial sample of 72 doctors.

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