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Unfree markets: Socially embedded informal health providers in northern Karnataka, India

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ABSTRACT

The dynamics of informal health markets in marginalised regions are relevant to policy discourse in India, but are poorly understood. We examine how informal health markets operate from the viewpoint of informal providers (those without any government-recognised medical degrees, otherwise known as RMPs) by drawing upon data from a household survey in 2002, a provider census in 2004 and ongoing field observations from a research site in Koppal district, Karnataka, India. We find that despite their illegality, RMPs depend on government and private providers for their training and referral networks. Buffeted by unregulated market pressures, RMPs are driven to provide allopathic commodities regardless of need, but can also be circumspect in their practice. Though motivated by profit, their socially embedded practice at community level at times undermines their ability to ensure payment of fees for their services. In addition, RMPs feel that communities can threaten them via violence or malicious rumours, leading them to seek political favour and social protection from village elites and elected representatives. RMPs operate within negotiated quid pro quo bargains that lead to tenuous reciprocity or fragile trust between them and the communities in which they practise. In the context of this 'unfree' market, some RMPs reported being more embedded in health systems, more responsive to communities and more vulnerable to unregulated market pressures than others. Understanding the heterogeneity, nuanced motivations and the embedded social relations that mark informal providers in the health systems, markets and communities they work in, is critical for health system reforms.

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Introduction

The current policy thrust towards universal health care in India (HLEG, 2011) is premised on the participation of adequate numbers of skilled health providers who operate within a unifying regulatory framework. However, qualified providers are unevenly distributed geographically, with remote rural areas and urban slums particularly underserved (Gangolli, Duggal, & Shukla, 2005; NCMH, 2005; Rao, Rao, Shiva Kumar, Chatterjee, & Sundararaman, 2011). Many of the providers who do work in these marginalised regions lack government-recognised medical degrees and are known in India as RMPs (acronym discussed in further detail later). In India, although only registered providers are allowed to practice, poor regulatory enforcement allows RMPs to enterprisingly fill an informal market for curative allopathic treatment. The dynamics of

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these informal health markets, which shape the behaviour and practice of RMPs as well as the dependence on them in marginalised regions, are relevant to the policy discourse, but are at present poorly understood.

In this paper, we examine how informal health markets operate from the viewpoint of RMPs in northern Karnataka, India. By drawing upon sociological literature on markets and empirical data, we describe the varied motivations, social relations and linkages (with formal health providers and the community) that underpin RMP practice. In doing so, we contribute insights to an emergent literature on the institutional context of informal service provision, which is relevant to the policy discourse in India and to marginalised populations accessing informal health markets the world over.

Literature review

In economics, markets are seen as arenas for the exchange of goods and services in which buyers and sellers participate to maximise their interests. However, economic sociologists like new

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institutional economists argue that markets can also be seen as being contingent on social relations, structures and norms. In addition, economic sociologists find problematic the separation of human behaviour into mutually exclusive spheres, defined as selfinterested market relations versus political social relations (Swedberg, 1994). They argue that economic goals can be pursued in conjunction with social goals like sociability, approval, status and power (Granovetter, 1992). Individual economic action is not about self-interest alone, but can also involve reciprocity and redistribution (Mackintosh & Gilson, 2002). Market expressions, therefore, reflect settlements negotiated by human actors who are motivated by multiple goals and influenced by their embedded location in social relations and contexts as defined by broader political economies.

A more nuanced sociological approach to understanding how markets function is critical for health systems in Asia and in other low and middle income contexts. Private health providers are dominant, but the complex dynamics that define their discretion or dependency within the health systems, markets and communities in which they work require further investigation (Kamat, 2001; Kielmann et al., 2005; Krause, 2001; Sheikh & George, 2010). The contradictions and ambiguities of contemporary health markets in unregulated contexts are particularly relevant to informal providers (Bloom, Standing, & Lloyd, 2008; Peters & Bloom, 2012).

Informal providers are increasingly being recognised as major providers in the south Asian region (Ahmed, Hossain, & Chowdhury, 2009; Rashid, Akram, & Standing, 2011). In India, these providers have long been recognised as playing a critical role (Neumann, Bhatia, Andrews, & Murphy, 1971) and historically outnumbered formal providers. The 1881 census recorded 12,620 physicians and surgeons, 582 army hospital medics and 60,678 unqualified practitioners (GOI 1883 cited by Duggal, 2005). Although informal providers represent a network that outnumbers providers with government-recognised degrees in rural areas, their numbers are still insufficient considering the volume of rural health needs. A study in Uttar Pradesh had to cover three times the villages originally planned in order to reach their desired sample of RMPs (Rohde & Viswanathan, 1995: p. 42). Similarly, Ashtekar and Mankad (2001: p. 448) found that 84% of villages in Nashik district, Maharashtra, had no resident private provider – not even an informal one.

In India, the terminology to describe informal allopathic providers or RMPs can be confusing. RMP used to stand for Registered Medical Practitioner. Prior to independence, the colonial government began registering unqualified rural practitioners in 1933, requiring a certificate from a revenue officer attesting to their successful practice for ten years (Rohde & Viswanathan, 1995) or their apprenticeship with other experienced providers (Jeffery, 1988). Today the only doctors gualified to practise allopathy in India, and who are eligible for registration, are those who hold MBBS degrees. Nonetheless, the term RMP persists in India and permission to practise allopathic medicine is not effectively controlled by the state. For example, Ashtekar and Mankad (2001: p. 451) listed 43 different degrees reported by rural medical practitioners in Nashik district, Maharashtra. This is beyond the degrees that the government recognises for medicine: MBBS (Allopathy), BDS (Dentistry), BAMS (Ayurveda), BHMS (Homoeopathy), and BUMS (Unani). In our study, we defined RMPs as private providers who provide allopathic curative care without having any of the degrees for medicine recognised by the Government of India.

Cross and MacGregor (2010) highlight the problematic assumptions around defining informal providers, the context of their biomedical and economic transactions, and their networks with other providers. They argue for a more nuanced understanding of RMP practice. One step in that direction is made by Ingram, Sudhinaraset, Lofthouse, and Montagu (2012), who define informal providers as those who: 1) receive payments from patients rather than institutions, usually in an undocumented fashion, 2) receive little or no officially recognised training, 3) operate outside the purview of regulations, registration or any official oversight, and 4) may be part of professional associations that do not have certification or regulatory authority. Based on this definition, their review found that these providers represented a significant proportion of the health sector varying from half to more than half of all providers in Asia and Africa and generally had high patient loads (Ingram et al., 2012).

Informal providers are increasingly recognised as an important part of health systems in various contexts (Ingram et al., 2012; Konde-Lule et al., 2010; Kruk, Rockers, Varpilah, & Macauley, 2011; Omaswa, 2006; Onwujekwe, Onoka, Uzochukwu, & Hanson, 2011). In the south Asian context, the poor clinical quality of care rendered by informal providers is well established (Ahmed & Hossain, 2007; Chakraborty & Frick, 2002). While training interventions have most frequently been used to address this problem (Ingram et al., 2012), a combination of interventions that change the institutional relationships, incentives and accountabilities of these providers is recommended (Shah, Brieger, & Peters, 2010). Understanding the contextual basis of the institutional relationships that support their knowledge, livelihoods and reputations is critical (Bloom et al., 2011). Following these recent reviews that argue for a more contextualised understanding of informal providers, and those who have described medical pluralism in India (Khare, 1996; Pinto, 2004), we detail the social profile of these providers, including how their practice is embedded in and regulated by their relations with formal health systems, markets and communities in which they work and live.

Methods

Data for this paper is derived from a research site comprising 60 villages in Koppal district, northern Karnataka, India, together with the larger villages and towns to which its inhabitants routinely travel for health care. With just over 1 million people, Koppal district has the worst development indicators within Karnataka (Sen, Iyer, & George, 2008). As a drought-prone agrarian economy, it has high levels of poverty, illiteracy, seasonal migration, and adverse caste and gender hierarchies. Caste hierarchies are based on the notion of ritual purity inherited at birth that restricts intermarriage and inter-dining. The caste system, which traditionally defined occupational groups, remains a powerful determinant of access to resources, as well as discrimination and violence, even if its boundaries can be blurred and contested.

Three data sources are used. *First*. a household survey in 2002 on health care utilisation for self-reported morbidity from a circular systematic random sample of 12.5% (or 1920 of 15,360) households in the project area. Second, a private provider census in 2004 in the 60 villages within the project area and surrounding 11 market villages and commercial towns, which collected data on informal providers i.e., RMPs with no degrees or with claims to unrecognised degrees (Box 1), traditional birth attendants, spiritual and traditional healers, provision stores selling tablets, unlicensed medical stores that serve as informal pharmacies, as well as formal providers (i.e., licensed medical stores (pharmacies) and laboratories, private doctors with MBBS, BDS, BAMS, BHMS, BUMS degrees). Among informal providers, this paper focuses on RMPs. Third, daily field notes recorded during nine months of ethnographic study on health service provision in 2004, as well as from unstructured observations and interactions with RMPs to this date during training sessions on maternal health care.

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Box 1. Degrees found in our census not recognised by the government as permitting autonomous medical practice.

RMP Certificate, RHMP (Rural Homoeopathic Medical Practice), DHM (Diploma in Homoeopathic Medicine), MBHS (Diploma in Medicine, Biochemistry and Homoeopathic Science), various forms of Ayurvedic Basic degree (Diploma, Doctorate), DIASM (Diploma Indian Allopathic System and Medicine), MDAS (Medical Diploma in Ayurvedic Service), DSAS (Diploma Shudha Ayurvedic Surgery), BEMS (Bachelors of Electro Homoeopathic Medicine), GCIM (Graduate Certificate in Integrated Medicine), LAMS (Licentiate in Ayurvedic Medicine and Surgery) and LMS (Licence of Integrated Ayurveda and Medicine).

Interviews during the provider census were approximately 1 h long, excluding the time taken to obtain informed consent, and canvassed in the local language, Kannada. Each completed interview form, including detailed notes for qualitative segments, was reviewed by the authors on the same day as the interview. Periodic review meetings were also held with all investigators to reflect on findings. All qualitative segments were subsequently translated into English.

Interview data along with observation notes were reviewed and grouped into broad categories before being manually coded. They were then analysed using the 'framework' approach, which structures enquiry prior to data collection while accommodating additional research questions that emerge through data collection (Ritchie & Spencer, 1994). A priori themes drawn from the provider instrument included location of practice, provider demographics and training, treatments provided, preventive/public health activities, fees, referral, motivation, livelihoods, political activities, proassociation activities, linkages fessional with medical representatives. Emergent issues included availability, demonstrating results, people contact, delayed payment, social sanctions and arose from interviewees' responses. Finally, analytical themes based on patterning of emergent themes were also identified as health system and community embeddedness, reciprocity and trust. Descriptive tabulations of the quantitative data together with the qualitative data were reviewed in order to understand recurring and emerging themes and nuances in the data.

Efforts were made to ensure that a multiplicity of RMPs and their views were represented, including outliers or discordant responses that were further examined and contextualised through the analysis. Triangulation took place by comparing quantitative and qualitative responses from the census, comparing census responses with observation, and comparing observation across investigators. In addition, initial findings were shared with project stakeholders for their review and validation. Research activities were approved by an institutional review board constituted at the national institution supporting this research.

Results

We present our results in three main sections. We first outline the nature of health care seeking and provision based on household survey and provider census data. We then focus on RMPs, clarifying who they are socio-demographically, their qualifications and professional networks, before describing how they perceive the social relations that underpin the informal markets in which they practise.

Health care provision and utilisation

Our census of private providers in 2004 covered 546 providers within the 60 villages in our project site and a remaining 264 providers in the surrounding 11 market villages and commercial towns with 3 refusals overall. Of the 546 providers in the project site, 47 were RMPs and 1 was a doctor with a government-recognised degree in Ayurveda. The others were spiritual healers (35), traditional healers (133), traditional birth attendants (178) and provision stores (152). In contrast, the four largest commercial towns contributed 36% of 91 RMPs, 93% of 42 private doctors, 84% of the 70 medical stores and 100% of the 8 laboratories in the census. Out of the 42 private doctors interviewed, only 13 (30%) were MBBS doctors.

While RMPs, government health providers (health assistants, sub-centres, PHCs and CHCs) and private solo doctors constitute the first port of call for those seeking treatment for short-term ailments, the location for seeking such care is markedly different (Table 1). Treatment undertaken at home is mainly by spiritual and traditional healers, some RMPs, and provision stores. Treatment sought outside the home, but in the same village or surrounding villages, is predominantly by RMPs, followed by government primary health care services, with RMPs more likely to be available in the same village as the patient. It is only for treatment at the subdistrict, district or beyond, for which private doctors or government and private hospitals are selected.

Table 1

Population estimates of type and location of first provider sought for short-term ailments.

Location of first provider	Total		At home	Same village	Other village	Sub-district capital	District capital	Other district/state	
Type of first provider	N	%	%	%	%	%	%	%	
RMP	3880	42.8	13.6	60.5	51.7	0.0	0.0	0.0	
Government primary health care	1825	20.1	6.8	16.9	37.1	7.4	4.0	1.7	
Private solo doctor	1401	15.4	0.0	0.0	0.0	74.2	39.7	72.6	
Provision store	561	6.2	9.0	12.2	0.9	0.6	0.0	1.7	
Government hospital	357	3.9	0.0	0.1	5.0	12.1	16.1	5.1	
Private hospital	264	2.9	0.0	0.0	2.6	3.0	36.2	17.2	
Religious healer	215	2.4	22.6	1.8	1.8	0.6	0.0	1.7	
Traditional healer	213	2.3	20.6	2.7	0.9	0.6	0.0	0.0	
Medical shop	180	2.0	0.0	3.8	0.0	1.4	4.0	0.0	
Self	56	0.6	9.0	0.6	0.0	0.0	0.0	0.0	
Relative, neighbour	49	0.6	11.5	0.0	0.0	0.0	0.0	0.0	
Other	48	0.5	6.8	0.6	0.0	0.0	0.0	0.0	
Dai	16	0.2	0.0	0.4	0.0	0.0	0.0	0.0	
No response	8	0.1	0.0	0.2	0.0	0.0	0.0	0.0	
Total	9073	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

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RMP origins and linkages

Who are they?

Almost all RMPs were men aged 40 on average (range: 22–81 years). Three out of five were upper caste and a similar proportion had a standard 12 education (high school). Although two out of three RMPs practised in the district where they were born and raised, they tended to work in villages other than their own (Table 2). RMPs with limited endowments (by way of training or caste status) were particularly inclined to migrate for work away from their native villages, but remaining within the state.

RMPs reported addressing mainly outpatient conditions, whether they were infectious, chronic or socially sensitive. Most reported treating malaria, typhoid, coughs and colds, asthma, vomiting and diarrhoea, white discharge, jaundice, headaches, stomach pain, joint and body pain. One or two RMPs reported treating cholera, pus filled infections, paralysis due to stroke, rheumatism, arthritis, allergic bronchitis, diabetes, anaemia, eye problems, haemorrhoids, urinary tract infections, hydrocoele, sexually transmitted diseases, skin disease, mental health problems and infertility.

Although just under a half of RMPs reported earning income from non-medical ventures (Table 2), many have alternative sources of income. Qualitative responses and observations revealed that RMPs cultivated land, managed real estate or transport assets and/ or taught in local schools or colleges. Those that remained in their native villages and/or were upper caste, were more likely to report being economically secure. RMPs also reported having family members who earned salaries (as *anganwadi*, railway, or factory

Table 2

Characteristics of RMPs.

Characteristics	RMP without degrees	RMP with unrecognized degrees	Total	
	N = 49	N = 42	N = 91	%
Origin				
Koppal district	37	25	62	68
Other northern districts	12	13	25	27
Southern districts	0	1	1	1
Other states	0	3	3	3
Caste				
Upper caste	28	29	57	63
Middle caste	12	7	19	21
Schedule caste/schedule tribe	3	4	7	8
Christian/Muslim	6	2	8	9
Main source of training				
Apprenticeship with relatives	18	3	21	23
Apprenticeship with providers	27	8	35	38
Technical training (some degree)) 1	31	32	35
Other unspecified	3	0		
Visited by a medical representative	e/drug salesman	in the last mor	ith	
Yes	14	23	37	41
Unknown	1	0		
Professional association membersh	ip			
Yes	17	17	34	38
Unknown	0	1		
Working in native place				
Yes	19	10	29	32
Have another source of income not	t based on medi	cal practice		
Yes	22	19	41	46
Unknown	0	1		

workers), or who were engaged in commerce of some kind (clothing, welding, cement, garage and medical shops).

Only 38% of RMPs reported being members of an RMP association (Table 2). Among those RMPs who did report being members, most mentioned associations serving to improve their medical information base, with only a few also describing it as a space to discuss problems related to their profession. It is hard to assess the political strength of RMP associations. One district official commented that RMPs were highly organised and therefore able to continue practising despite their illegality. Although many RMPs report struggling for their day-to-day earnings, some were observed to actively participate in party politics, while others were part of the social elite in their villages.

Training

Out of 91 RMPs, 49 had no degrees and 42 had degrees not recognised by the government (Box 1). RMPs in Koppal reported valuing training as critical to their practice. One of these RMPs from a small village reported, "Today whatever type of RMP we may be, we have to study. We bring new books and consult wellexperienced doctors" (RMP23). RMPs without any degrees mainly learnt their trade from apprenticeships with other providers or relatives, while those with degrees mainly learnt from courses. In addition, those with degrees also learnt from hands-on experience. One of them who practised in the district capital reported, "I have learnt through my education in Electro Homoeopathy, my experience in a medical store, two years working in a government hospital and through children's health training from the Rotary club" (RMP 61). Although he did not reveal what 'post' he held in the government hospital or what constituted 'training' from the Rotary club, for him they represented important sources of authoritative medical expertise.

Although the health providers that trained RMPs usually belonged to the private sector, five RMPs mentioned receiving training from government doctors. One of these RMPs learnt from his experience in a remote PHC that is periodically understaffed and often unmanned. He reported, "When I go to the PHC, if the patient is injured and the doctor has to do stitches, then the doctor asks for my help. I help with putting the bandages on, doing the stitches and washing the wounds. In these unavoidable circumstances, they ask for our help and I help them a little" (RMP38). In other instances, RMPs were found practising in government services that had sufficient staff in place.

RMPs being trained in the private sector provided assistance during particularly busy clinics or with less technically demanding tasks. One of these RMPs from a small village goes every Sunday for training in a private clinic. He explained, "I go to the private doctor, because he has more patients. Mostly I give injections and the private doctor gives me bus fare and fees in return" (RMP 54). In general, apprenticeships are seen as mutually beneficial for both formally qualified providers (whether government or private), who require cheap and earnest labour, and for RMPs who seek opportunities to learn medicine unofficially.

Service networks

While apprenticeships provided training, they also fostered networks among providers. Overall, only a third of the RMPs, especially those without degrees, referred patients to government services (Table 3). As one of these RMPs from a large town explained, "If it's a major ailment involving more syringes or expenses, I send them to the government hospital" (RMP56). Government services can also be relied upon to provide diagnostic services that an RMP cannot afford to invest in. One interviewer reported that an RMP working in a large town "does his blood smear tests for malaria in the government hospital and asks patients to go

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Table 3	
Nature of RMP	practice

Nature of practice	RMP without degrees	RMP with unrecognized degrees	Total N	
	N = 49	N = 42	N = 91	%
Main location of practice		_		
Commercial area	9	21	30	33
Residential area	37	17	44	49
Outskirts	3	3	6	7
Unknown	0	1		
Fixed timings for services				
Yes	16	22	38	42
Travelling to other villages to provid	le services			
Yes	30	19	49	54
Provision of drugs in addition to pre	escription			
Provides 100% drugs of	3	5	8	9
prescribed drugs	2	1	2	3
Provides 75% of prescribed drugs	-	1 6	3 28	31 31
Provides 50% of prescribed drugs		-		
Provides 25% of prescribed drugs	10 12	22	32 20	35 22
Provides 0% of prescribed drugs	12	8	20	22
Referral				
Mainly government	20	8	28	32
Mainly private	21	26	47	53
Other	7	6	13	15
Unknown	1	2		
Main motivation for work location				
Native place	21	12	33	37
Good earnings	17	15	32	36
Political contact	4	7	11	12
People contact	6	2	8	9
To help others	0	0	0	0
Other	1	5	6	7
Unknown	0	1		
Main way of helping poor patients v	who cannot pay	1		
Defer payment	37	35	72	87
Discount	4	4	8	10
Refer	1	2	3	4
No care	0	0	0	0
Unknown	3	1		

to the government hospital to get tested for tuberculosis. He also supplies them with government tuberculosis tablets afterwards" (RMP 60).

These referral networks serve as important information channels. As one RMP from a small village explained, "I send patients to this doctor in the big town, his relative runs the Blood Test Centre. He will check and send the patients there. Then he sends them back to me for further treatment. I don't get any monetary benefit from him, but he gives me information about the condition free of cost" (RMP19).

Apart from sustaining continued learning, these referral linkages also guide patients in their efforts to access an otherwise overwhelming plethora of higher-level health services in unfamiliar towns. Not all of this behaviour is altruistic. In some instances, RMPs are financially rewarded for referring patients to private clinics. As one RMP practising in a village close to the district capital explained, "If any complicated patients come, I take them to Dr.X's clinic. If the bill comes up to Rs.3000–4000, I get Rs.500–600" (RMP8). Both private and government doctors were reported by RMPs to offer financial kick-backs.

Some RMPs strategically attempt to consolidate their business by creating service networks that link their treatment with provision stores, medical shops or diagnostic centres within their families. As one RMP from a large town explained, "After my son completes his MBBS, I will make him work in a government PHC for 10 years, after which I intend putting up a nursing home. I want a medical store for my other son and I also wish to set up my own laboratory" (RMP83). Government services in these instances served as a launching pad, subsidising efforts to develop more established private services.

Informal market and community pressures

Setting up practice

Being able to practice in their native village was an attractive proposition for RMPs, but only a third of them were able to actually do so (Tables 2 and 3). An equally important consideration was income (Table 3). Many RMPs cited 'good earnings' as their main reason for relocation. An RMP who migrated from a village to a subdistrict headquarter said, "I came here for the sake of filling my stomach and as the income is good" (RMP88).

Social contacts also played a critical role for those RMPs who relocated beyond their native village. One of the RMP who migrated for work said, "Known people were here. They used to come to my uncle for treatment. They told me that there was no doctor here. That is why I came" (RMP10). 'People contact' and/or 'political contact' were therefore important considerations that determined the location of RMPs (Table 3).

No RMP listed 'helping people' as the main motivating factor for their current location. Although four RMPs, including two upper caste RMPs, did mention a sense of social duty in their qualitative responses, philanthropy or social work was not a primary motivator. Two of these providers were involved in local party politics.

Being available

Cultivating social connections was viewed as an essential prerequisite in the decision to relocate, and also to ensure a client base for their practice. One RMP explained how he could not adjust to one village because, "There, all the doctors should follow the RMP method. This means going from door to door to give treatment. People will not come to the clinic" (RMP45). More RMPs without degrees travelled to other villages for service than those with degrees (Table 3).

In addition to being available everywhere, RMPs were also expected to be available around the clock, especially those without degrees (Table 3). An RMP without any degree explained, "If we fix timings for our clinic, it's an insult to the patient. One cannot know when one is going to fall sick. Only if we are ready to give treatment whenever it is needed, we will be known as good doctors. If I sleep for two nights in a week, I am lucky" (RMP57). By making themselves available at all times, RMPs try to respond to the unpredictability of illness and to the needs of poor patients whose livelihoods depend on getting better fast.

Demonstrating results

RMPs reported being buffeted with unrealistic expectations regarding instant cures, which they negotiated in a number of ways. One tactic was to counsel or mollify their patients. When this failed, they resorted to scare tactics. An upper caste RMP reported, "A person came complaining of a cold, so I gave him a prescription. The next day he came and shouted at me: 'You have given me Rs.20 medicine for a mere cold and it has not got better.' Then I told him that without my treatment, he had chances of getting typhoid. All doctors do this, because people don't believe us" (RMP72). RMP responses indicate that the lack of regulatory standards is a problem for both patients and providers.

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Another way to secure patient belief is to practise allopathy. One RMP without any degree noted, "If we ask a patient with high fever to drink cumin and ginger solution, they won't bother to return to us again for help. We have to give them injections and tablets" (RMP25). Another RMP with a degree explained more bluntly, "We should not practise allopathy, but if we don't, our practice won't run" (RMP73). As the financial and professional security of providers depends on meeting patient demand for quick relief, this has led to the wide acceptance of cross-practice.

In the context of unregulated markets, providers are under pressure to provide visible forms of treatment. More RMPs without degrees than those with degrees dispensed at least 50% of medicines they prescribed (Table 3). One RMP reported, "...we require the money. If we do not give injections, people say that the doctor is not good. That is why we give an injection and take Rs.10" (RMP55). Only two RMPs expressed concerns about the pressure to provide medicines and injections regardless of need. They could afford to do so, as they were cultivators of irrigated land and not financially dependent on their health work.

Defending boundaries

Some RMPs were more circumspect about their expertise and careful not to generate expectations they were not able to fulfil. As one RMP from a small village explained, "I do not treat serious patients...I can fight with disease, but not with the God of Death (*Yama*). In case the patient dies, the community will blame us" (RMP39). Another RMP from a large market village stated, "Even if I am confident that I can give treatment, I send serious patients elsewhere. If something goes wrong, we are the ones who will get a bad name" (RMP87). These responses indicate that one way for RMPs to guard their reputations is to selectively provide services to those who can be easily cured or attended to.

This is not necessarily a negative practice and can reflect professional ethics through a kind of self-restraint. As one RMP from a small village said, "Some doctors hesitate to refuse patients. Only after wasting half the patient's money, do these doctors finally tell them to go to bigger cities. That is why even if we lose our respect, we tell them from the beginning that it is not possible to treat them here" (RMP6). Recognition by RMPs of the limits of their skills is corroborated by responses related to emergency care. Although RMPs reported attending to emergencies like problem deliveries, heart attacks, injuries, suicide attempts, snakebites and seizures, most RMPs reported responding by giving first aid and then referring patients to government facilities or to hospitals out of the district.

Negotiating fees

When asked how they respond to patients who are poor and who may not be able to pay for their services, RMPs stated that they gave free treatment. This would seem to indicate a philanthropic orientation, yet the qualitative data revealed that 87% of the RMPs meant that they would take money from patients later (Table 3). An RMP reported, "If they do not give money, I treat them for free and afterwards I take money from them" (RMP22). What is reported by RMPs as 'free treatment' actually entails delayed payment.

These delayed payments were not concessions that RMPs made, but were presented to them as *fait accompli* by their patients. An RMP said, "I give them treatment and have to take whatever they give or keep quiet if they do not pay" (RMP15). Observation notes by field investigators and the lead author also described that RMPs do not explicitly ask patients for money.

Fees are implicitly understood, not as a one-time exchange, but as part of a series of interactions. An RMP reported, "I don't like to go to other villages, as I have to spend on bus fare and take medicines. But when we give medicines, some people do not pay. If we do not go after them, that money will not come at all" (RMP76). In this way, delayed payments sometimes serve to bind relationships in ways that ensure continuity of service delivery.

This *fait accompli* perceived by RMPs is also due to the stark subsistence of patients in this region, for whom survival is enmeshed with debt. Since RMPs rarely keep records, payment is made according to informal trust relationships that follow the patterns of village life. One RMP reported a high level of trust: "We give them free treatment. We take money if they pay, otherwise not. Here many people go for daily wages. When they get earnings they will pay. Nobody will cheat. They treat us like their own family members and we also look after them with the same love. If we visit them during lunch time, some people will not let us go until we have our lunch" (RMP10).

Trust by RMPs in their patient's memories about debts incurred cannot be avoided, as RMPs reported not being in a position to deny treatment if fees were not paid. An RMP conceded, "We cannot demand any fixed amount from the people in the villages. If we insist on a fixed amount, from the next day onwards people will stop coming. Then we will have to sit swatting flies. Our practice will end and we will have to leave" (RMP23). At the same time, RMPs also viewed trust in the ability of patients to pay back as risky. Another RMP stated, "If a doctor is very intelligent and able to cure any type of disease, people will say his treatment is good. But no doctor will stay for a long time because people are very rough. After taking treatment, they will ask for credit. I have yet to recover Rs.8,000. From where can I raise this money?" (RMP29). As RMPs perceived social constraints against pressuring people to pay, they felt that their practices were not as profitable as they would have liked them to be.

In order to have more financial security, RMPs at times actively cultivated closer relations through their fee structure. One of these RMPs reported, "For house visits to regular patients I charge Rs.10, but for others I charge Rs.20" (RMP79). However, having closer relationships can also lead to greater social constraints against recovering fees, especially for those practising in their native village/town. One such RMP noted, "If the medicine costs Rs.30, patients give only Rs.15. We do not earn anything, because we do not charge the full amount, as all the patients are known people" (RMP54). These responses from RMPs highlight how being embedded in communities has benefits, but that after reaching a threshold, being embedded is also a trade-off that constrains their practice. We discuss this in more detail below.

Community support and belligerence

Some RMPs asserted that they faced no problems from the communities in which they lived. These same RMPs were local elected representatives or came from upper caste families and were part of the village elite. Other less privileged RMPs reported various challenges related to working in communities, reflecting how delicately balanced their position in villages was. Several of these RMPs reported being warned by the police or other government authorities against practising medicine. In such instances, community support can counter unpredictable government enforcement efforts. An RMP noted, "Once there was a police complaint against me and the police came. But the village people told the police to leave me alone, because if there is any problem at night, there is no one in this place to help them" (RMP25). Communities do rally around the RMPs they trust, even if it is also because they have few medical alternatives to turn to in some villages.

Community support for an RMP can be conditional, however. Communities do seek retribution against RMPs who are seen to have caused harm to people. While undertaking the census, one RMP was not interviewed as he had been driven out of the village several months earlier for having injected a child who subsequently developed severe complications. Another RMP noted, "Once an

RMP doctor handled a delivery case...as the baby died, people beat the RMP" (RMP50). Another RMP reported, "One person had a heart attack and despite my pumping on his chest, he expired. The villagers started spreading rumours that I had done something to kill the patient" (RMP89). These responses show that communities deploy strategies ranging from rumour, police cases, even violence to counteract what they consider bad clinical practice by RMPs, even if some RMPs belong to the village elite from being higher caste or from having political connections.

RMPs reportedly were judicious in their responses to the problems presented by particular patients or communities. In addition, RMPs proactively protected their social reputation by courting favour with village elites, especially since elected representatives were mentioned as mediators in situations of controversy. One middle caste RMP reported, "When I first came to this village, the *panchayat* members were grumbling a lot, so I used to treat them on a priority basis without charging them" (RMP3).

In extreme circumstances, RMPs also used the police to protect their own interests. The same RMP said, "I started by giving free treatment to *panchayat* members, but gradually the number of people requiring free treatment increased. That is why I made a police complaint and since the police came to beat up the culprits, there are no longer any problems" (RMP3). As local police are known to favour of village elites, turning to the police for help demonstrated this RMP's own powerful social position.

Discussion

RMPs are a critical resource for households as a primary point of care, referral and advice. While operating on the periphery of formal health systems, their training and referral networks are intimately integrated with qualified providers in both government and private sectors. While unregulated market pressures drive RMPs to sell allopathic curative commodities or make home visits around the clock, they also report being circumspect about restricting their practice to 'simple' cases. However, even with 'simple' cases, RMPs reported that their 'medical' expertise could be called into question. RMPs without any degrees seem more vulnerable to these pressures than their colleagues with unrecognised degrees.

In addition to being embedded in formal health systems and unregulated market dynamics, RMPs, unlike other private allopathic providers, are deeply marked by their social relationships with the communities they are based in. Trust relationships emerge, as a function of familiarity and rapport, as well as due to quid pro quo bargains that stem from the RMPs' vulnerability and a lack of alternatives. Being embedded in social relationships, RMPs are inhibited from formally charging fees or refusing services, even though they are also personally motivated by profit. Patients can defer payments in ways that RMPs cannot fully control. Communities can also threaten the reputation of RMPs through rumour or retaliate with violence. Nonetheless, RMPs are not entirely defenceless. They also can deploy political strategies or fall back on their elite social status to expand their client base and protect their interests.

Our data draws from baseline research for a safe motherhood project that was not intended to test conceptual models regarding RMP practice. Social desirability bias in terms of not disclosing alternative income and providing free treatment became apparent when triangulating across data sources. While our interview data was collected in 2002 and 2004, the realities that they represent remain relevant today, as validated by our more recent field observations and by other research from India (Gautham, Binnendijk, Koren, & Dror, 2011). Our observations while tracking pregnant women, deliveries and obstetric complications in the project site indicates that the role of RMPs has reduced in terms of their provision of injections (oxytocin, vitamins) for home deliveries, due to the increase in institutional deliveries prompted by government cash incentives. However, their role in providing timely access to curative outpatient care has remained constant.

Our research illuminates the social context, relations and varied motivations that underpin RMPs roles in Koppal's unregulated health care markets, demonstrating that despite operating illegally and informally, RMP expertise, service networks, reputations and success are deeply embedded in the formal health systems and communities to which they belong. For the many villages with no resident government or private doctor available at night, RMPs provide treatments that reassure patients. In other instances, RMPs are complicit in irrational health care consumption that further indebts and endangers patients. Poor quality of care and the consequences of unregulated markets are issues that plague India's complex health system as a whole (Das, 2011). Despite the concurrence on the detrimental effects of unregulated markets on health care, research that elucidates the perspectives of providers operating in such environments is rare (Kamat, 2001; Kielmann et al., 2005; Nichter & Nichter, 1996; Pinto, 2004; Sheikh & George, 2010). Our research, grounded in sociological analysis of markets, reveals both the socially responsive and mercenary characteristics of RMP social relations, motivations and practice. Any reforms to improve effective access to quality care must consider these nuances within their social context, rather than assume that RMPs are a homogenous group and that markets unilaterally skew provider incentives in any one direction. Consideration of the social status of providers and their membership within health system. market and community relationships is critical to understanding how informal markets function.

Conclusion

The unregulated nature of private practice is a well-recognised phenomenon in many low-income health systems. However, the informal nature of RMP practice does not mean that they are completely free agents. RMP training and service networks are strongly linked to other government and private providers. Although villagers respect RMPs as doctors, who have the power to heal, RMPs cannot act with impunity. For many, life as an RMP is an uncertain and negotiated balance between various community pressures that mediate how payments are made, how favour is ensured and what happens when trust is violated. Although concern has been expressed about the poor quality of care and commercialising pressures of unregulated markets, very little research has explored how providers negotiate these pressures from the health systems and communities where their services are based. This article hopes to contribute to the emerging interest in informal providers, by illuminating the contribution of other disciplines to understanding health markets as institutional arenas with heterogeneous actors marked by multiple social relations, linkages and nuanced motivations.

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