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Who Are 'Informal Health Providers' and  
What Do They Do?  
Perspectives from Medical Anthropology

Jamie Cross and Hayley MacGregor  
September 2009



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## Who Are ‘Informal Health Providers’ and What Do They Do? Perspectives from Medical Anthropology

Jamie Cross and Hayley MacGregor

### Summary

This paper explores gaps and limitations in the conceptualisation, methodology and policy implications of debates about informal health care providers by examining a cross section of empirical studies. Drawing on a tradition of critical medical anthropology, we argue that existing debates hinge on a particular understanding of what constitutes appropriate knowledge and on particular expectations of how economic actors in the medical marketplace will behave.

**Keywords:** informal providers; markets; medicine vendors; access; quality; expertise.

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# Contents

Summary, keywords, author notes	3
Acknowledgements	6
<b>1 Introduction: thinking through a problem</b>	<b>7</b>
<b>2 Knowledge economies, expertise and legitimacy</b>	<b>9</b>
2.1 Boundary making	10
2.2 Fuzzy boundaries and hybrid practices	11
<b>3 Markets, medicine and the morality of exchange</b>	<b>13</b>
3.1 Transactional analyses and moral economies	14
3.2 Livelihood strategies	15
3.3 Pharmaceutical supply chains	16
<b>4 Conclusion: studying up</b>	<b>18</b>
<b>References</b>	<b>19</b>

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# 1 Introduction: thinking through a problem

Who are the unlicensed, unregulated or informal private providers of medicinal services and products in Africa and Asia, and what do they do? Informal providers of health care vary considerably in terms of: (1) knowledge (formal qualifications and institutionalised training); (2) the position they occupy in the marketplace (their commercial orientation or dependence on medicine as a livelihood option); (3) the complexity or scale of their organisation; and (4) their position in a broader supply chain of public health commodities (Conteh and Hanson 2003). In a growing and heterogeneous literature on the subject there is debate over whether or not a definition should include traditional healers, or peer educators and lay health workers whose very roles have been created by development interventions. Efforts to formulate a bounded definition of informal providers also have a specific discursive function. They are frequently intended to delineate or make visible a 'target category' amenable to technical interventions by development actors and agencies, with observable public health outcomes. This paper explores gaps and limitations in the conceptualisation, methodology and policy implications of this debate by examining a cross section of published research papers on informal providers.

The question of what to do about the very real problems of dangerous health care practices among formal and informal private providers is an immediate and pressing concern among policymakers, academic researchers as well as civil society stakeholders (Berman 1998; Mills *et al.* 2002; Travis and Cassels 2006). In many low- and middle-income countries, upward of three-fourths of care is provided in the non-state sector (WHO/USAID 2007) and the health objectives established by the Millennium Development Goals add some urgency to engaging with both formal and informal providers (ICDDR, B 2007). The growing body of policy oriented literature on the subject is grouped around a set of specific health priorities, the specific dangers to public health that are presented by the diagnostic and dispensing practices of informal providers, and a range of proposed interventions. To date most research has focused on issues around malaria (Goodman *et al.* 2007; Williams and Jones 2004), tuberculosis (Floyd *et al.* 2006; Gharat *et al.* 2007; Salim *et al.* 2006) and HIV/AIDS (Brugha 2003; Mills *et al.* 2002); as well as to a lesser extent sexual, reproductive and mental health. Unchecked dispensing practices, meanwhile, have a number of potentially harmful effects including unintended side effects from super or sub-therapeutic dosages or from drugs used in combination, increased microbial resistance, for example to ineffective malaria prophylactics (WHO 2001), and the transmission of blood-borne diseases like Hepatitis by unsterile administration practices (El Katsha *et al.* 2006). Studies of the role played by Nigeria's patent medical vendors in the treatment of malaria (Brieger *et al.* 2004; Okeke *et al.* 2006; Oladepo *et al.* 2007), for example, have focused attention on the sale of cheaper, in-effective, out of date and poor quality anti-malarials by patent medical vendors and their limited knowledge of more efficacious artemisinin-based combination drugs. The failure of informal providers to provide appropriate diagnoses can also result in haphazard referral systems and delayed decisions in seeking care. In India and Bangladesh,

for example, the inability of informal providers to recognise the gravity of symptoms is seen to contribute to the persistence of high pregnancy related morbidity, child and maternal mortality (Killewo, Anwar *et al.* 2006; George 2007).

A range of interventions currently seek to bring about explicit improvements in the quality of care offered by informal providers, harnessing their unmet potential as public health workers. These are broadly focused around: (1) Knowledge: improving the appropriateness of the drugs or information informal providers dispense; (2) Performance and safety: increasing access to their goods and services, bettering the safety and affordability of their practices; and (3) Accountability: building social mechanisms that can regulate their activities (Travis and Cassels 2006). Knowledge based interventions, that aim to educate or train both providers and client communities in order to balance asymmetries in information, have emerged as one popular model. Market based interventions which seek to improve the practices of informal providers by introducing good practice and performance targets, are another. Social franchising and 'drugs for performance' schemes, for example, essentially reward sellers if they comply with minimum standards of diagnostic procedure, disease classification, treatment regimens, referral, recording and reporting procedures.

We argue that such a framing of this contemporary problematic rests on what we take to be two sets of assumptions. The first set of assumptions hinges on a particular understanding of expertise. Ideas about what constitutes appropriate knowledge proceed from a biomedical frame which calls into question ways of knowing or practising medicine that fall outside. This is most apparent in the repeated exclusion of non-allopathic health care providers or alternative, non-biomedical systems and by the emphasis on universal standards of practice. From this perspective, informal providers only show up on the health policy radar when they raise concerns over claims to biomedical expertise or over their use of biomedical products. The second set of assumptions hinges on expectations of how economic actors in the medical marketplace will behave, and are based on a particular rendering of the human subject as a rational, calculating, profit maximising individual. This is most evident in anxieties around the immorality and self-interest of 'self made medical authorities' or 'entrepreneurial practitioners'.

This paper seeks to challenge these assumptions by bringing together empirical studies of informal providers from development academia, public health research, health economics and medical anthropology. Much of this literature is based on data collected through questionnaires and some combination of structured interviews, observations, simulated client methods (which use actors, role plays and vignettes), outlet mapping, exit interviews and household surveys (*cf.* Goodman *et al.* 2007). In addition, we sought to include a body of qualitative anthropological research that too often remains outside the applied arena. While we acknowledge that ethnographic evidence is not necessarily neutral or unproblematic, we looked to draw upon the insights of longitudinal studies that included observational or ethnographic research tools as part of their methodology.

This paper is not however intended to be a systematic literature review. Rather it is meant as a discussion paper based upon published research that seeks to flag a series of issues around knowledge and expertise, markets and economic

transactions that are less frequently discussed. Our aim here is not to promote a new set of interventions but to encourage a critical reflection on the underlying assumptions, the classificatory schemas, and the kinds of evidence being used to design regulatory interventions in the medical marketplace.

Our discussion begins by addressing the global, national and local politics of biomedical knowledge. We argue that current debates about informal providers tend towards the imposition of a classificatory order on the frontlines of the medical marketplace. While policymakers are primarily concerned with the question of how to effectively and safely practise biomedicine, 'critical medical anthropology' offers an alternative perspective situated outside this frame.

Our discussion proceeds by exploring research on the transactions that take place between informal providers and their customers in the medical marketplace. We argue that portraits of informal providers which draw on only one kind of evidence tend to establish clear cut distinctions between different kinds of practitioner; 'dis-embed' biomedical transactions from the social structures within which they take place; invest the motivations and interests of actors with an over-riding economic rationality; freeze or anatomise what are dynamic economic relationships between stakeholders, and obscure or ignore the position of informal providers in a global pharmaceutical supply chain. We conclude by asking what the implications of this critical commentary are for health policy interventions, focusing on the relational aspect of transactions between informal providers and their clients and the corporate practices that shape markets in pharmaceutical commodities (*cf.* Ecks 2008b).

## 2 Knowledge economies, expertise and legitimacy

New theoretical approaches within health research have begun to address health care systems as knowledge economies rather than 'simple assemblages of technical services, goods and personnel' (Bloom and Standing 2008; Bloom *et al.* 2008; Leonard 2002). This approach reorients health policy interventions aimed at improving the private sector provision of medicine and places the emphasis on redressing asymmetries in information. Informational inputs into this knowledge economy (that aim to improve the knowledge of practitioners about appropriate medications and drug dosages, and the knowledge of consumers around quality and performance) are presented as correctives that will assist in the development of proper functioning markets for curative services and preventative public health.

For the purposes of this paper we step outside an interventionist health policy frame to ask what insights can be gained from unpicking the production of knowledge in current debates about informal providers. Working within the framework of critical medical anthropology we approach biomedical knowledge as 'discourse', in that it defines and produces the objects of our knowledge (Hall 1997: 44). Critical medical anthropology emerged from a tradition of Marxist political economy to ask how biomedicine is embedded in the capitalist world system (Baer *et al.* 1986). In the Foucauldian tradition, medical anthropologists

ask how biomedical knowledge comes to have authority and how this knowledge shapes the world that it describes (see Martin 1994; Young 1995). From these perspectives biomedicine appears as a 'system amongst systems', a particularly modern discipline that readily exerts a hegemonic influence over bodily knowledge and practice (Lock and Scheper-Hughes 1996).

We see no contradiction in both advocating biomedical solutions *and* recognising that biomedicine is an important field for the production and reproduction of power. The use of an exclusively biomedical framework to assess the quality of care offered by informal providers and their level of expertise, however, has specific discursive outcomes that shape human subjects and social relations. As Susan Reynolds Whyte and Harriet Birungi (2000: 172) have written, this is an intellectual position that raises 'uneasy questions about the distribution and politics of knowledge for those who respect the potential of biomedicine to improve health'. Who has the right to know what about medicine? And based on whose rationality? What constitutes appropriate or legitimate knowledge? And when or under what circumstances do people acquire legitimacy?

From this starting point, the classifications of biomedical knowledge, practices and practitioners into discrete categories appear as expressions of interest, authority and power rather than benign or neutral acts. In this paper, we resist the impulse to offer a set of definitions that fix who informal providers are and what they do. By doing so we seek to draw attention to the movement of practitioners between positions of legitimacy and illegitimacy and the redrawing of boundaries between what is legitimate and illegitimate as a result of shifts in public health policy. Taking our cue from Sarah Pinto (Pinto 2004), we understand informal health providers as people who 'operate on the boundaries of legitimacy'; people who are defined by and in relation to legitimating institutions.

## 2.1 Boundary making

Future health systems, it is said, are 'unlikely to be characterised by the kinds of clear boundaries between experts and non experts that have characterised twentieth century systems in advanced market economies' (Bloom and Standing 2008: 8). Yet current debates over informal providers – the type, quantity and quality of their biomedical knowledge, their qualifications to know or practise biomedicine, and the exclusion of those who practise in other traditions (and in fact frequently integrate elements of biomedicine) – seem precisely to be about constructing and maintaining boundaries between lay-practitioner and legitimate expert. Typologies of the medical marketplace that slip into a distinction between 'doctors and non-doctors' (Ahmed and Hossain 2007), for example, reveal precisely this kind of boundary making.

If one consequence of the 'marketisation' of and spread of health related knowledge is a shift in the boundaries of professional expertise (Standing *et al.* 2008: 4), perhaps we should also expect that national debates over future health systems will reveal local anxieties among those who have an interest in protecting and defending their claims to expertise. The construction of boundary lines between proper or pure biomedical knowledge is socially and historically situated.

In particular contexts and at particular junctures the line between expert and inexpert knowledge, appropriate or inappropriate practice, shifts. Community health workers, for example, represent a classic example of this phenomenon. In one era they are a solution, in another they become a problem.

Efforts to define legitimate and illegitimate health care providers can often appear to have a 'hidden transcript'. At one level concerns over the level of training and the type of qualifications held by informal providers are about guarantees of competence that practitioners can use biomedical knowledge safely. At another level, however, these concerns can have unintended discursive outcomes that assert, protect and defend the legitimacy of biomedical experts. Discussions about private health provision at the national level are thus not necessarily divorced from the local politics of boundary making that works to maintain authoritative bases of biomedical expertise.

In South Asia, for example, national debates over concerns about unregulated informal providers all too easily can reproduce associations between specific ways of knowing and particular categories of people. The distinction between what is considered legitimate or illegitimate medical knowledge and practice is then mapped onto a local social landscape. Descriptions of informal providers as 'irrational' or 'thug-like' by registered practitioners, for example, are articulated within a social hierarchy. They offer a reminder that statements about knowledge and morality are often deeply entwined with prejudices and preconceptions based on caste, class, gender or ethnicity. As Stacy Leigh-Pigg's work in Nepal has shown, the field of rural health care can prove to be a potent site for the production and reproduction of politically salient social categories (Leigh-Pigg 1990, 1996).

Reading between the lines of studies on informal providers from the region one can discern the social politics of boundary making that we are concerned with in this paper. One recent study of informal providers in north Bangladesh (Ahmed and Hossain 2007) maps biomedical knowledge and practice onto a social cartography. The authors define knowledge as 'a delineated set of biomedical concepts and procedures accompanied by formal certified guarantees of competence'. Their study identifies informal providers not simply by their lack of education or training but by their specific lack of certified knowledge from recognised institutions. The portrait of irrational village practitioners and their fatalistic rural patients also marks a social hierarchy between agents of development and the people they target, so that lay knowledge or practice comes to be defined by and against the rational, educated, elite cosmopolitan. As Sarah Pinto has put it, informal practitioners are 'those against whom the educated and rational self is defined' (Pinto 2004: 356).

## 2.2 Fuzzy boundaries and hybrid practices

There is considerable interest in the contemporary health literature on the 'blurred' boundaries between public and private, formal and informal health systems (Bloom and Standing 2008; Bloom *et al.* 2008). To date, the debate has been concerned with public health professionals who cross over into the marketplace;

discussions have centred on government health professionals who supplement or subsidise their low pay by selling goods and services in the medical marketplace (Bloom and Standing 2008). The 'porous boundary' between the formal and informal sector, however, allows for movement in both directions and we broaden this debate to consider how informal medical entrepreneurs use their associations with 'legitimising institutions' in order to build reputations, gain status, and pursue their livelihoods. Just as formal providers constantly assert and defend the legitimacy of their knowledge and practice in reference to those who operate illegitimately (see above), informal providers constantly draw upon the signs, symbols, and language of formal actors and institutions to legitimise themselves.

Development interventions in the arena of public health have served to incorporate informal providers into formal, institutionalised structures. Rural development projects and village health campaigns frequently recruit self appointed local medical practitioners as participants. Participation in NGO/state training programmes can sanction or legitimise informal providers. Training programmes can offer formerly illegitimate practitioners new livelihood opportunities as assistant nurses, village or community health workers. Alternatively, they can also offer new sources of institutionalised identity and language with which informal providers can assert themselves as experts in the medical marketplace. Biomedical research programmes can offer a similar source of institutional legitimacy. People who are employed to oversee and administer clinical trials can draw on this connection when the trial is complete in order to invest themselves with an institutional authority.

In Africa and Asia people engage with medical practitioners who are not doctors but who 'invent roles for themselves as medical experts and representatives of development' (Pinto 2004: 337). In the gaps left by legitimate public health systems, self-made or entrepreneurial practitioners draw upon the authority of medical and development institutions without any formal sanction to offer services in a medical frame. Their claims to expertise and authority invoke outside institutions (NGOs, local government), mobilise associations by kinship or marriage, deploy biomedical technologies or commodities, and communicate in ways that present themselves as beacons of education or 'rationality'. For unqualified and self-appointed rural medical practitioners in Uttar Pradesh, for example, the use of needles provides entry into a legitimating structure; the injection is a performance that borrows from the work of doctors and the stuff of hospitals (Pinto 2004: 353; Jeffery *et al.* 2007). In India and Southern Africa alike, practitioners of 'traditional' medicine – healers and Ayurvedic doctors – draw on biomedical symbols, treatments, instruments, and diagnostic technologies, as a source of legitimating authority (Lambert 1996; Reynolds Whyte *et al.* 2003: 9; Nisula 2006: 209). In South Africa, this is manifested also in efforts to construe African traditional healing as 'African Science' (Ashforth 2005).

Current debates on informal providers within the existing literature tend not to include in the discussion a consideration of traditions of treatment, healing and care that exist outside a biomedical frame. Yet in Africa and Asia allopathic and non-allopathic medicine exist side by side in the marketplace. Working definitions of 'informal provider' that fail to fully address the influence and integration of biomedicine into other therapies, miss the everyday plurality of therapeutic

practice with respect to concepts, discourse, diagnostic technology, instruments and pharmaceuticals. In South Asia, for example, there is more blurring of boundaries between Ayurvedic, Homeopathic and Allopathic traditions (Bode 2006; Frank and Ecks 2004; Nisula 2006) than is commonly granted and medical systems, structures and symbolics can be said to 'intermingle' (Khare 1996). Rigid definitions of biomedical practice miss the hybrid nature of everyday medical practice in many parts of the world where providers adapt or syncretise their practices and, in doing so, blur the boundaries between biomedicine and non-allopathic traditions (Kielmann 2002; Frank and Ecks 2004; Kielmann *et al.* 2005; Datye *et al.* 2006).

### 3 Markets, medicine and the morality of exchange

Current debates about the activities of informal providers in markets for health care rest on a series of apparent paradoxes and contradictions. On the one hand, the informal economy is presented as essentially 'unregulated' and informal providers are portrayed as 'unaccountable' economic actors prone to self-interested behaviour. On the other hand, informal providers are frequently recognised as locally situated social actors who are entwined in binding relationships, networks of kinship, patronage and reciprocity. Similarly, on one hand the transactions between providers and their clients are often assessed in normative terms that imagine these as potentially therapeutic consultations. On the other hand, these providers are frequently shown to be located in fiercely competitive marketplaces where their everyday dispensing practices are driven by consumer demand.

The existing terms of debate on informal providers offer little scope for adequately addressing the complexity of transactions that straddle the market and the social world. For anthropologists, 'neither world can be reduced to an externality' (Ortiz 2005: 74). The nature of small scale, localised medical or health care business in a highly competitive marketplace means that individual providers constantly seek to build and maintain good relationships with their clientele by offering goods and services that meet local expectations of care or value for money. In rural African contexts, for example, this might mean making drugs available on credit if people cannot pay for medication up front (see, for example, Marsh *et al.* 1999; Bierlich 1999). In urban South Asian settings like the slums of Karachi and Mumbai, where poor patients can ill afford to wait and see if they have been 'cured' but look instead for a temporary reprieve that can get them through the day, this might mean that diagnostic procedures and dispensing practices with no immediately perceptible outcome are likely to be taken as signs of ineffectiveness or corruption (Kamat 2001: 902).

This section examines the way in which the market and market relationships are discussed in contemporary debates on informal providers. The interactions between users and providers is more complex than some of the literature allows for and we introduce a more nuanced understanding that: (a) acknowledges that

economic activity outside the control of the state is not necessarily disorganised or uncontrolled; (b) recognises that informal providers are concerned to make a living but are also social actors who operate within moral economies and ethics of care; and (c) situates informal providers in a wider pharmaceutical supply chain.

### 3.1 Transactional analyses and moral economies

To what extent do public health concerns with the quantity of biomedical knowledge or the quality of biomedical practice match the everyday expectations and preferences that people bring to their transactions with providers? Existing policy perspectives focus on interactions between provider and patient as a consultative or advice-giving moment. Researchers frequently announce that medical sellers, vendors and pharmacists have an important role in meeting the information demands of their clients regarding general health knowledge, drug use and family planning (Gül *et al.* 2007). Yet the circumstances under which customers actually prompt a medicine seller for information or advice often remain unclear. In empirical studies, information seems to remain a minor feature of observed interactions between patent medical vendors or pharmacy attendants and their customers.

In many cases the transactions between medical sellers and their customers are better understood if we think of them as market transactions rather than imagine them through the normative lens of public health policy. Placing cost rather than symptoms at the centre of transactions between medicine sellers and their customers more accurately reflects the observed content of interactions, the concerns of the actors, and better explains the outcomes. In research from sub-Saharan Africa, South and South East Asia, customers are rarely reported to actually engage vendors in anything approaching a 'therapeutic consultation' and medical sellers rarely ask customers questions about their illness (Goodman *et al.* 2007; Chalker *et al.* 2000). Studies of informal providers that pay attention to the speech economy of transactions with customers, for example, show that vendors act primarily as salesmen who simply respond to direct requests from their clients rather than as repositories of diagnostic wisdom or advice (Goodman *et al.* 2007; Brieger *et al.* 2004; Kamat and Nichter 1998). Thinking about the transactions between providers and their patients/clients as economic, means seeing them in terms of meeting client expectations of value for money rather than high quality, efficacy or safety.

Arguing that these transactions be understood primarily as economic is not to suggest, however, that the actors can be understood as calculating and self-interested individuals. Economic anthropologists do not deny that economic decisions may be logically reasoned or profit maximising, where choices are evaluated and decisions made that maximise utility. They do, however, question the universality of this model of microeconomic behaviour (even in advanced capitalist societies) and recognise instead that social relations and obligations also affect how decisions are arrived at and options evaluated.

Transactions between informal providers and their clients in the medical marketplace may not conform to the ethics of consultative practice within a biomedical

paradigm but they remain embedded in value systems and ethics of care that shape economic choices and decisions. Bottom-up approaches to biomedical ethics recognise that informal or market based providers remain within a moral economy of care that influences ‘the content and the nature’ of their decisions and their communication with clients (Datye *et al.* 2006: 435). These value systems configure norms of ethical practice that shape how providers perceive their role and responsibilities to patients/clients, and what is expected or demanded of them. A study of dispensing practices in Mumbai’s slum pharmacies, for example, showed that vendors frequently refused to sell prescription drugs to clients who were new or unknown to them because of concerns that they presented a ‘suicide risk’ (Kamat and Nichter 1998). Similarly, when presented with a list of medicines by cash-strapped clients suffering from chronic illnesses they invariably guided them towards low cost, curative drugs over more expensive palliative medicines (*ibid.*). In cases where low-income patients were observed presenting prescriptions for multiple medicines, pharmacy attendants frequently made decisions on the basis of their appropriateness and utility rather than their profitability.

The social forces acting on informal providers in what are highly competitive medical marketplaces do create very real regulatory dynamics, even though this dynamic might not correspond to normative assertions of what a functioning market for health care should look like. In East Africa, for example, where state hospital pharmacies seldom have stocks of necessary drugs, drug shop owners are tacitly allowed to infringe regulations designed to restrict the sale of prescription medications and government doctors commonly write informal ‘scripts’ for patients to take to the shops (Goodman *et al.* 2007). Increased policing of state regulations in this context would constitute a fundamental denial of access to basic medication. Regulatory enforcers have accepted that tightening controls on the sale and circulation of drugs would conflict with basic public health objectives, not to mention their own understandings of the morality of the situation.

Interventions aimed at improving the knowledge and practice of retailers and salespeople illustrate a preoccupation with ‘knowledge deficiencies’ and the purity of biomedical knowledge but can ignore the practical question of whether, when, how, or in which contexts customers actually ask the seller of medical drugs and treatments for advice. Little surprise, perhaps, that vendor training programmes sometimes appear to have little impact on the everyday content of transactions. Examples from Uganda (Goodman *et al.* 2007) show that while interventions may leave vendors better informed about dosages and drugs, everyday business pressures and economic concerns about losing customers are what determine whether or not this information is actually used.

### 3.2 Livelihood strategies

Attempting to understand ‘the rationale for provider behaviour’ (Williams and Jones 2004) rather than evaluating knowledge and practice through the normative lens of public health policy would seem to be a precondition for coming to terms with the factors that *encourage* and *militate against* pharmacy assistants taking on

proactive 'advice giving roles'. 'Livelihood strategies' can provide a useful way of understanding provider behaviour, especially in highly marketised environments. The exchange of medical commodities or services for money is a livelihood strategy for people with vastly different kinds of social, cultural and economic capital. Conceptual distinctions between formal practitioners and informal providers suggest some kind of fundamental difference in their business practice. Yet from a livelihoods perspective, the prescribing practices of formally regulated doctors and the dispensing practices of unregulated medical vendors do not necessarily occupy different positions on a scale. Empirical studies of both groups show that educated, certified or licensed general practitioners confront the same pressures of competition and customer expectations as small-scale patent medicine vendors. Practitioners and vendors alike struggle to retain the patronage of their clients in the face of stiff competition and must do so by meeting the demands and expectations of customers for a particular kind of product, service and/or treatment.

Studies of private general practitioners in South Asia repeatedly demonstrate how massive competition between providers drives diagnostic and prescriptive practices. Government doctors who moonlight as private practitioners in Karachi's slums, for example, recognise that they are over-medicating patients but blame the incessant demands among patients for 'more medicine' and the cut throat competition between practitioners (Thavera *et al.* 1998). Similarly, proliferation of practitioners and vendors in India's medical marketplace has created intense competition for patients and customers.

Informal providers repeatedly inform researchers that the demands of their customers determine their sales practice but these claims are consistently discredited by researchers as a convenient cover for self-interest and profiteering. On the basis of their review of literature from sub-Saharan Africa, Goodman *et al.* (2007), for example, counsel against accepting statements by medicine sellers that 'consumer pressure' drives their sales practices. They warn that vendors often choose to 'blame consumers for their own profit maximising behaviour'. One alternative reading of these claims, for example, is not as deliberately disingenuous but as straightforwardly unreflexive accounts of market demand. Just as doctors fail to recognise how the increased reporting of sickness, ill-health and disease can be the product of prescription practices, vendors can fail to recognise demand as an artefact of their own dispensing practices (Ecks 2008a; Van der Geest *et al.* 1996).

### 3.3 Pharmaceutical supply chains

As knowledge economies, health care systems are not only about the politics of ignorance. The pharmaceutical industry is acknowledged to be 'the main knowledge generator in the field', as evidenced by the increased familiarity of patients/clients with the names of branded pharmaceutical commodities and commonly prescribed allopathic medicines (Jeffery *et al.* 2007). Even in the absence of information about the effects of pharmaceutical commodities, allopathic drugs continue to be invested with social and symbolic meanings which lead to them being highly valued (Reynolds Whyte 1992; Reynolds Whyte and

Birungi 2000; Reynolds Whyte *et al.* 2003). Yet existing debates frequently downplay the role of pharmaceutical companies, wholesalers and marketers in shaping everyday demand or dispensing practices (*cf.* Syhaxhang 2002; Syhaxhang *et al.* 2001; T.K.C *et al.* 2002). The 'logic of practice which unfolds as different stakeholders in the medical marketplace interact and respond to each others' immediate and longer term needs and motivations' (Kamat and Nichter 1998: 793) is everywhere plugged in to these global networks of information and drugs (Petryna *et al.* 2006). Yet very few contemporary public health interventions targeting the problems posed by informal providers of medicine take into account the specific effects of capitalist marketing and strategies of supply as drug producers direct their products into the marketplace.

By maintaining a rigid focus on the knowledge and practice of retailers or salespeople, current debates about the role of informal providers in future health systems deflect attention away from other actors in the pharmaceutical supply chain. Relatively little is known, for example, about the 'pharmaceutical gift cycle' (Oldani 2004: 337) exchanges between representatives and doctors, links between salespeople and wholesalers, marketers and pharmaceutical companies. Yet in a medical marketplace increasingly defined by the commercial interests of pharmaceutical companies, the dispensing practices of informal providers, the 'institutional arrangements within which patent medical vendors obtain their supplies', the way that credit schemes and targets manifest themselves in retail practice, and the role of middlemen demand to be examined in greater detail (Appelbaum 2005: 21; Kamat and Nichter 1998; Oladepo *et al.* 2007).

Discussion about knowledge and practice among informal providers that does not move beyond the provider-client interface fails to see the relationships that connect actors, agents and institutions in a pharmaceutical supply chain, down which goods and knowledge are transferred in the biomedical economy. Concerns about holding informal providers accountable lift these individuals out of a whole chain of commercial relationships that extend upwards and downwards. Informal dispensers of allopathic medicines, for example, are linked to suppliers, wholesalers, and pharmaceutical companies.

In the biomedical tradition, it is the potentially toxic, noxious and harmful effects of pharmaceutical drugs that represents a key concern for public health (Reynolds Whyte *et al.* 2003). Expert anxieties with regards to unregulated or informal providers of allopathic medicine are rooted in this pharmacological knowledge that understands the potential for harm in poorly dispensed or prescribed drugs (Jeffery *et al.* 2007). But if biomedical experts recognise that pharmaceutical products are inherently unsafe, why do small-time dispensers (who are more likely to respect the potency of drugs) rather than pharmaceutical giants carry the burden of responsibility for safety? A shift in focus away from the consumption of drugs and distribution of knowledge, to the production of allopathic commodities and knowledge about drugs would present new opportunities for critical engagement with the institutions and interests that shape markets for health care.

## 4 Conclusion: studying up

Our response to the public health challenges posed by informal providers has not been to offer a definitive set of conceptual frameworks, theories, or methodologies from medical anthropology that have been or could be applied to the study of markets involving informal providers. Rather we have used this paper to ask a series of questions about the production of knowledge, and about who informal providers are and what they do.

The first half of this paper was an exercise in deconstruction that asked: What do current debates about informal providers do? On what basis is expertise or quality of care evaluated, and do classificatory schemas antagonise social distinctions based on class or caste? Do rigidly biomedical definitions of who an informal provider is limit the capacity of interventions by disqualifying practitioners who could make positive public health contributions?

The second half of the paper presented a more complex portrait of markets that began to ask: Do normative assumptions about what provider-client relations should involve misconstrue the content, the interests and the ethics of existing transactions? And, do the assumptions that underpin existing interventions result in ineffective or limited outcomes?

This paper recognises the immediate and pressing concerns to public health presented by informal health care providers on the frontlines of the medical marketplace. But existing debates around informal providers are, almost without exception, focused on low-level providers of health care products in ways that neglect their relationships to the higher levels of the pharmaceutical supply chain. Understanding what creates the demand or need for medicine requires attention to a bigger picture beyond the small-time economic actor. Patients are situated in medical marketplaces where ideas about health, well-being and disease are not static but are being constantly 're-ordered as biomedicine becomes an increasingly significant reference point and a primary therapeutic resource' (Kielmann 2002: 153). Patient perspectives and expectations shape the everyday practices of health providers and, as 'practitioners cater to patient perceptions of their perceived morbidity' (*ibid.*: 148), they find themselves offering as many services or as many drugs as possible. Indeed we would argue that public health interventions cannot be planned without considering or engaging with the global pharmaceutical supply chain. As it stands, however, many development interventions place a substantial burden of responsibility for the delivery of health commodities and care on actors who occupy marginal or peripheral positions of economic, political and social power; people who in relative terms remain quite poorly placed to look after themselves.

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