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Characteristics of private medical practice in India: a provider perspective

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Supply factors, depicted by input market conditions and government regulations, and demand factors, depicted by financing mechanisms and utilization patterns, are likely to determine the shape and character of private medical practice. The interaction of this complex set of factors will have considerable implications for the cost, access and quality of services offered by this sector. Understanding these characteristics from a provider perspective is imperative to influence the behaviour of providers in this sector. This paper describes some of the important characteristics of private medical practice using a case study of an urban district in India, Ahmedabad, and analyzes their implications. Using survey data of 130 private doctors in the allopathic system, the paper describes broad characteristics of private medical practice using parameters such as growth of private practice, patient load and referrals within the sector, payment methods and determinants, patient concerns, and risks associated with private practice. The paper presents views on the prevalence of various undesirable practices in the private medical sector. It also discusses the awareness of providers about selected important regulations.

The findings suggest that growing capital intensity due to cost of location, medical equipment and technology, and financial sources of capital investments are some unfavourable environmental factors experienced by private providers. The findings also indicate a high prevalence of various undesirable practices and low awareness of the objectives of important legislation among practicing doctors. Lack of awareness of important and relevant legislation raises serious questions about the implementation of these laws. The paper identifies the strong need for instituting and implementing an effective continuing medical education programme for practicing doctors, and linking it with their registration and continuation of their license to practice. The paper also suggests that cost of health care, access and quality problems will worsen with the growth of the private sector. The public policy response to check some of the undesirable consequences of this growth is critical and should focus on strengthening the existing institutional mechanisms to protect patients, developing and implementing an appropriate regulatory framework and strengthening the public health care delivery system. The study also discusses various other policy implications arising.

Introduction

The characteristics of private medical practice depicted by internal competition within the sector, input market conditions, provider payment mechanisms etc., will have significant implications for the cost, access and quality of services offered by the private sector. Understanding these characteristics from a provider perspective is essential to influence the behaviour of private providers. These insights should also help policy-makers to design and introduce mechanisms to monitor and regulate this sector effectively. This paper describes some of the various characteristics of private medical practice and analyzes their implications. Using survey data of providers in the city of Ahmedabad, the paper attempts to describe provider views on the determinants of medical practice growth, patient load and referrals within the sector, provider payment methods and their determinants, financing mechanisms used by them, patient concerns, and risks associated with the private practice. The views of providers on the prevalence of various undesirable practices in the private medical sector, and their level of awareness about the broad objectives of various regulations in health care, are explored. Provider views on the effectiveness of these regulations are also discussed.

The private health care sector in India

The private sector plays an important role in India's health care delivery system. Through a wide network of health care facilities, this sector caters to the needs of both urban and rural populations and has expanded widely to meet increasing demands. The significance of the private health care sector in India can be summarized as follows:

- Total health expenditure in India is estimated to be about 6% of GDP, of which private health care expenditure is 75% or 4.25% of GDP. About one-third of this expenditure is on secondary and tertiary in-patient care, the rest

meeting the curative needs at primary level (World Bank 1995). Insurance coverage mechanisms are negligible and most of this expenditure is out-of-pocket.
- Private health care expenditure in India has grown at the rate of 12.5% per annum since 1960–61. For each 1% increase in per capita income, private health care expenditure has increased by 1.47% (Bhat 1996).
- About 57% of hospitals and 32% of hospital beds are in the private sector. The share of private sector investment in total health infrastructure, e.g. hospitals, investment in medical equipment and technology, is also quite significant.
- At present about 80% of 390 000 qualified allopathic doctors registered with medical councils in India are working in the private sector (Jassani 1989; Bhat 1996). There are over 650 000 providers of other systems of medicine practicing in India (Planning Commission 1998) and most of them are in private practice.
- Utilization studies show that one-third of in-patients and three-quarters of out-patients utilize private health care facilities (Duggal and Amin 1989; Yesudian 1990; Visaria and Gumber 1994).

From perspectives of health expenditure, number of qualified doctors working in the health sector, and delivery of curative care at primary level, the present private/public mix of health care is highly skewed in favour of the private sector. The growth of this sector has been quite significant during recent times. There are several reasons for this. The budgetary support of government has not kept pace with the growing population's health care needs. Moreover, the growth of the private health sector has also been triggered by factors such as a new economic policy regime in India, the rapid influx of medical technology, and a rising middle-income class. It is well recognized that the market failure affecting both demand and supply sides of the market for health services will have significant implications for the cost and quality of health care. Despite the undesirable consequences of private health sector growth (on cost, access and quality), there has been a virtual absence of mechanisms, both within and outside the government, to influence the growth of this sector in desirable directions.

The debate on the role of private health care has primarily focused on issues of cost and quality. Studies indicate that private health care practice significantly affects both the cost and quality of available health care services in India (Uplekar 1988a, 1988b; Duggal 1989; Vishwanathan and Rohde 1990; Yesudian 1990). Cases of superfluous services and the high cost of services rendered by private physicians and hospitals have been reported (Uplekar 1989; Duggal 1989). Recently the issue of consumer protection has been addressed and the effectiveness of legislation in this area has been discussed (Tulasidhar 1994; Bhat 1996).

In order to strengthen the role of the private sector, it is important to identify areas of intervention to make it more responsive to the problems of its growth. Significantly, despite the problems resulting from private sector growth, little is known about these markets and the viewpoints of various stakeholders. This paper is one attempt in this direction. The following sections describe the providers' perspective on the characteristics of private medical practice in India.

Study methods

A questionnaire was sent to 495 private doctors practicing in Ahmedabad City (population 4 million). A sample of 500 doctors was selected using random selection from a list of 2920 doctors registered with the Ahmedabad Medical Association (AMA). Five names were found to have an incomplete address. In total, 108 doctors responded to our questionnaire, a response rate of about 20%. Respondents included both graduates (having MBBS degree) and post-graduates (having MD degree). The mailed questionnaire was followed by in-depth interview of 22 private doctors (selected randomly from the list of 500 doctors).

The two-pronged approach of mailed questionnaire and interview was used to check whether the mailed responses differ from the interviews, and to obtain qualitative information on various aspects. No statistically significant differences were found between the questionnaire responses and the interview results. The findings presented in the paper are based on the questionnaire responses; however, the doctor interviews provided insights in a number of open-ended questions. Many of the views expressed by providers during interview were subjective in nature, and attempts were made to corroborate all such views with others and to present balanced findings. However, the findings and presentation are still subject to non-response bias and subjective assessment on various issues, a limitation that is common to all such studies.

The questionnaire consisted of a set of closed-ended questions and a few open-ended questions which pertained to the operational activities of private practitioners and their opinions regarding cost, quality of care and regulatory mechanisms affecting private medical practice (a copy of the questionnaire can be obtained from the author on request). A number of questions required the ranking of factors to arrive at the most important factor. A five-point scale was used to rank the factors and the average score was arrived at using the rank information and number of observations. Before sending the questionnaire, a pilot study was conducted to assess the relevance, clarity of language and content matter of the questionnaire, for which seven doctors from different disciplines were interviewed.

Table 1 provides the number of years of experience and a specialization profile of the 108 respondents in the study survey.

Results

Growth in private practice and new entrants

There has been a general increase in health care demand because of the growth in population, growing urbanization and a general increase in income levels. In the survey, 84% of respondents have experienced growth in their practice. However, this growth is not uniformly spread across all

Table 1. Characteristics of respondents

Experience	Respondents (%)	Specialization profile of respondents	Respondents (%)
Less than 5 Years	19	General Physician	42
5 to 10	22	Gynaecologist, Obstetrician & Paediatrician	37
10 to 20	23	Surgeon	9
20 to 30	27	Other specialists: ENT & Orthopaedic	7
Above 30 Years	10	Anaesthetist	5
Total	100	Total	100

Table 2. Factors affecting the growth in private practice

Reasons	Rank						Average score
	1	2	3	4	5	No rank	
Increasing demand for health care	27	12	15	11	4	22	2.79
Medical facilities in vicinity	3	4	7	9	16	52	0.95
Specialized skills and technology	28	25	9	7	2	20	3.11
Experience	25	24	22	4	4	12	3.29
Promotion effort	8	14	8	7	4	50	1.52

providers. Table 2 provides survey findings on factors considered important by providers in influencing the growth of their private practice.

Experience is rated as the most important factor in practice growth. This is one of the reasons why many new entrants find it difficult to start their own practice; experience is one of the most important barriers to entry. The second most important factor is the availability of specialized skills and technology. The general career plan of many prospective entrants in private practice is to acquire specialized skills during training, before starting their own practice. This is likely to enhance their opportunities to do well in their practice. Acquiring specialized skills generally goes hand in hand with technology and many providers feel that the growth of private practice is strongly influenced by these factors; factors which also contribute to private practice becoming more technology intensive. Given the general preference among providers for specialized services and the potential for better professional opportunities, there is significant growth in the private practice of highly specialized services. This in turn influences the decision of existing providers to refer their patients to high-tech diagnostic investigations to project the image of being a highly skilled and knowledgeable provider. This trend is increasing.

Local competition and the existence of other medical facilities in the neighbourhood are considered least important in affecting the growth of the respondents' practices. This is surprising and contrary to the belief that competition among providers is a serious problem. Similarly, promotional efforts are not considered important by a large number of providers. Medical ethics also prevents medical practitioners from promoting their practice. A general increase in the demand for health care is considered the third most important factor influencing growth in private practice.

Patient load

Patient load and the clinical practice of spending time with each patient by private providers will have a significant bearing on the quality and cost of health care. Most private doctors work in their chambers in either the morning or evening, and some practice at multiple locations. This timing pattern of private practice primarily addresses the convenience and needs of clients. Discussions with private providers suggested that a general physician can physically see only about 25 patients a day (not including emergency cases). Assuming a physician spends about 20 minutes with one patient, this works out to about 8 hours a day, which should define the maximum available time the physician can work.

In the present survey, we find that about 50% of providers have a maximum patient load of 26 or more (see Table 3). Only about 21% of providers experience patient load that falls in the suggested range. While examining the patient load of private providers, no distinction was made between new patients and old patients in the questionnaire.

Associated with patient load is the amount of time spent by a doctor on each patient case. If the majority of providers treat more patients per day, obviously they are spending less time on each patient. The survey shows that about 45% of doctors spend less than 15 minutes on each patient case. The direct outcome of spending less time on clinical diagnosis is that doctors can see more patients. A related issue is the number of referrals made in private practice, which enable the doctor to spend less time on clinical diagnosis and to examine more patients. The survey findings suggest that private doctors are spending less time on clinical diagnosis, and depend more on referrals and diagnostic tests. This will have significant cost and quality implications.

Table 3. Number of patients seen on a normal working day

Range	Minimum (%)	Maximum (%)
No patients	8	0
1–5	40	4
6–15	19	30
16–25	12	16
26–50	16	27
Above 50	5	23
Total	100	100

Referrals in private medical practice

The survey shows that 50% of private doctors occasionally refer patients to other specialists, and in one-third of cases this referral is quite frequent. In the case of investigations, 56% of doctors refer patients frequently or most often to diagnostic facilities. Table 4 provides information on referral practices to specialists and for diagnostic investigations.

Table 4. Practices of patient referral to specialist doctors and for diagnostic investigations

Frequency	Recommending for		Information sought by patients about diagnostic centre (%)
	specialists (%)	diagnostics (%)	
Never	17	2	3
Occasionally	50	42	37
Frequently	23	45	30
Most often	6	8	27
In all cases	4	2	4
Total	100	100	100

When referring to specialists, the doctor generally refers the patient to particular individuals. However, in the case of diagnostics, doctors do not generally ask the patient to go to a particular place. Providers do, however, give suggestions if patients seek information about where they should go for diagnostic tests. In 60% of cases, patients seek such information from their physicians. The survey indicates that recommendations by physicians are generally based on quality and proximity factors. The diagnostic facilities operate as separate entities, but are linked with providers through the existing referral system.

Private provider payment system

The most dominant provider payment system in India is fee-for-service. In the present survey, 70% of providers charge on a fee-for-service basis and 30% charge on a case basis in which the total charges depend upon specific services and procedures. Table 5 provides information about the bases used for the two different payments systems.

Table 5. Provider payment practices

Fee-for-service (70%)		Case-based payment (30%)	
Basis	%	Basis	%
Cost based	47	Specific procedure	17
Market practice	28	Specific service	17
Medical association recommendations	11	Time spent	10
Use more than one basis	14	Other (mix)	55
Total	100	Total	100

Of fee-for-service providers, 47% use cost as the basis for arriving at their fee. About one-third of the providers follow what others are charging and use market-based data to determine their fee structure. The providers indicate that medical associations have very little influence on deciding the fees charged by providers. Only 11% of providers decide on the fee on the basis of association recommendations.

In the case-based payment system, charges depend on specific services or procedures, and time spent by the doctor with the patient. There is no specific basis used by providers and a large number of them (about 55%) use several factors in arriving at the payment amount required.

Medical insurance coverage or any other type of reimbursement system is very limited. In this survey 70% of providers said that less than 15% of their patients were covered by any reimbursement system or insurance.

Information-seeking behaviour of patients

Inter alia, the growing cost of private care is one major concern. About 64% of providers have indicated that patients

Table 6. Factors affecting the establishment cost of a private provider

Factors	Score (5 as most important)					Average score
	5	4	3	2	1	
Location	51	17	8	6	3	4.26
Equipment/new technology	42	36	12	4	1	4.20
Manpower	4	16	26	19	15	2.69
Maintenance	1	19	34	29	3	2.84
Other infrastructure requirements	1	7	10	17	37	1.86

generally request information about the expected treatment costs before the start of treatment. The equity implications of this need to be explored. Patients also generally ask for information such as recovery time and prognosis. When the provider is recommending referral for diagnosis, two-thirds of providers indicate that patients request information on where they should get these diagnostics done. Among various factors in the doctor–patient relationship, one of the most important is sharing of prescription and diagnosis. Only 59% of providers indicate that patients ask for a copy of the prescription and diagnosis.

Factors affecting cost of establishment

Since the majority of providers follow a cost-based approach, it is important to look at what factors affect these costs. About 90% of providers indicate that private practice has become capital intensive. Table 6 provides a ranking of factors which private providers think affect the establishment cost of a private facility.

Location is the most important factor affecting the total capital cost of an establishment. This is very closely followed by equipment and new technology, and their maintenance. Manpower, and costs associated with it, is ranked third.

Most of the existing private clinics are located in commercial areas. The cost of setting up new establishments is very high. Therefore, there is a growing tendency on the part of private providers to set-up establishments in residential areas, away from commercial centres. For example, a large number of nursing homes in the private sector are in residential areas. About 91% of the respondents consider the location of private facilities in residential areas to be beneficial because of proximity and reduction in overall cost to patients (such as transportation and medical help received in case of emergency).

Sources of finance

Capital expenditure per se does not determine the establishment costs. It is the mix of sources of finance which determine the cost of capital. The financial sources used by private providers will therefore have significant impact on the recurring and establishment costs. The availability of funds from normal capital-market and money-market channels critically depends upon the legal status of the organization and the security the establishment can offer to lenders. In the present survey, 92% and 5% of the establishments are registered as sole proprietor and partnership firms, respectively, with unlimited liability. The perceived risk of these organizations is generally highest and therefore normal channels of finance are not easily available to them. This affects the capital cost of medical establishments. Figure 1 shows the financing pattern of private providers in Ahmedabad.

The survey results indicate that 46% of providers do not use any borrowings to finance their total capital employed. In these cases, all investments are financed by the owner(s). On the other hand, 35% of providers use very heavy debt to finance their investments. Only about 19% of providers use moderate levels of debt to finance their capital investments. The pattern of financing, as shown in Figure 1, indicates a U-shaped curve for private providers in Ahmedabad. This is exactly the reverse of the financing patterns observed for many other forms of organization. It was not possible to find the source of providers' own capital contributions.

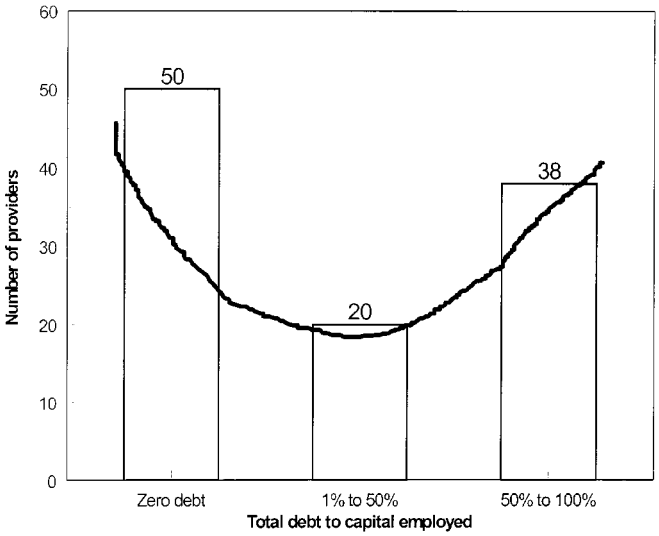

Figure 1. Financing of private health care facilities

Table 7. Problems associated with hiring trained and paramedical staff

Reasons	Score				Average score
	4	3	2	1	
Shortage of supply of paramedical staff	38	24	9	10	3.11
Expensive to hire them	35	18	15	10	3.00
Lack of exposure to latest procedures and equipment	7	17	28	21	2.14
Inadequate training	11	22	20	19	2.35

The overall cost of capital will have significant implications for the cost of health care. The interest cost of borrowed funds was 15% or more for about 83% of providers.

Problems associated with nursing and paramedical staff

The employment of trained and qualified personnel to ensure good quality care is considered an important requirement for health care facilities. There is a general impression among private providers that the growth in paramedical staff and their training has not kept pace with the increase in the number of health facilities. A widespread shortage of paramedical staff is being experienced by private providers in India. Doctors, therefore, hire untrained people to man their health care facilities. Except for a few states (e.g. Delhi, Maharashtra, Tamil Nadu and West Bengal), there are no regulatory mechanisms in place to ensure that health facilities are manned by properly trained personnel. The providers in our survey have ranked 'cost of hiring' as the second most important problem associated with manpower. Table 7 lists the problems faced by private providers in hiring trained and qualified staff in their facilities.

Perception of risk factors

The perception of risk factors in private practice can have a significant bearing on provider behaviour, and thereby affect the cost and quality of services. Economic theory predicts that under high-risk situations, returns expected by entrepreneurs are higher. Risks in private medical practice can arise because of two sources: supply factors such as regulations, conditions in the input market etc.; and demand factors such as fluctuations in demand, change in reimbursement mechanisms by employers etc. The given risk conditions will have significant bearing on the behaviour of private providers to protect their capital and maximize their returns. For example, uneven demand conditions in the market may significantly influence the behaviour of providers to fill the capacity during slack times.

Table 8 highlights the perceptions of private providers about risk factors, their relevance and whether these risks have increased over the period. The seasonal fluctuations in patient flow are considered the most relevant risk factor by 94% of providers, and 79% feel that this has increased over their period of practice. Cost-recovery risk is considered the second most important risk factor. The implementation of regulations is considered relevant but only 17% feel that it has increased over their period of practice. In general, risks arising out of regulations are relevant but providers do not think they have increased. However, the regulation giving more rights to consumers through the Consumer Protection Act *has* increased the risk environment of private providers.

Prevalence of undesirable practices

With the growth of private practice and the interaction of a complex set of supply and demand factors, many undesirable practices have grown. In an attempt to understand the complex behaviour of private providers, Yesudian (1994), through an opinion-based study, observes that medical malpractice and medical negligence seem to be rampant in the private sector.

In the present survey, we prepared a list of various undesirable practices in the private medical sector and asked the providers what they think is the prevalence of these practices. Table 9 reports the responses of providers and gives the average scores of these responses. Over-prescription of drugs is ranked as the first major, prevalent medical practice by respondents. This is followed by fee-splitting practices and inadequate measures for disposal of waste (ranked the same), followed by over-prescription of diagnostics.

Table 8. Relevance of risk factors and whether they have increased over the period of practice

Risk factors	Relevant (%)	Have increased (%)
Poor recovery of costs	88	51
Increase in operating and capital costs	87	69
Low patient flow (decline in demand)	86	38
Seasonal fluctuations in patient flow	94	79
Awareness of patients rights	84	64
Regulatory mechanisms	79	17

Table 9. Prevalence of certain practices

Aspects of practice	Prevalence				Don't know	Average score
	High	Moderate	Marginal	None		
Fee-splitting practices	24	33	28	6	13	2.82
Over-prescription of drugs	25	47	19	11	2	2.84
Over-prescription of diagnostics	14	37	37	13	1	2.51
Inadequate sterilization of medical equipment	12	19	36	28	6	2.16
Inadequate measures for disposal of waste	31	28	20	14	8	2.82
Inadequate fulfillment of standards	5	32	30	17	13	2.30
Inappropriate use of medical technology	4	31	37	18	10	2.23
Breakdown of trust in doctor–patient relationship	14	19	44	18	5	2.31
Inadequate information given to patients	15	23	38	18	8	2.37
Lack of accessibility during emergencies	12	20	39	22	8	2.24

Table 10. Typology of regulations

Aspects of private practice	Legislation/Declarations/Standards
Manufacturing, sale, quality and prescription of pharmaceuticals/ drugs	Pharmacy Act, Drugs and Cosmetics Act, Dangerous Drugs Act, Drugs and Magic Remedies Act, Drugs Control Act, Drugs Price Order, Poisons Act, Medical and Toilet Preparation Act, Narcotic Drugs and Psychotropic Substances Act
Medical and clinical practice (license to practice, basic code of conduct, negligence and consumer complaints and practice in specific areas)	Criminal Law, Civil Law, Consumer Protection Act, Indian Medical Council Act, Human Organ Transplant Act, Medical Termination of Pregnancy, Sex Determination, Declaration of Geneva
Facilities (including physical facilities, registration, inspection and renewal of facilities, technology, manpower)	Clinical establishment (nursing home) legislation (only in few states), Nurses, Midwives and Health Visitors Act (only in few states), Public Nuisance Act, Minimum Wage Act, Bureau of Indian Standards

Private health sector regulations

The role of the state is critical in mitigating the undesirable effects of private sector growth. Regulation is one important intervention to address some of the issues arising. This section provides information on providers' perspectives on regulations.

The central and state governments in India have promulgated several pieces of legislation to safeguard the health of the population. The existing set of regulations related to health care can be broadly divided into three categories, as described in Table 10.

In general, respondents feel that regulations are an effective way of protecting the interests of patients and overall medical practice. Only 11% of the participants in this survey think these laws are not effective in protecting the interests of patients. About 76% of respondents believe the laws are moderate to highly effective in protecting patients' interests. The assessment of the regulations was done by finding the awareness of providers about the objectives of various regulations, and how effective they think these regulations are. Figure 2 provides the survey results on this issue.

It is important to note that, among various regulations, the Consumer Protection Act (COPRA) gets a near maximum score. About 93% of respondents indicated their awareness of the main objective of COPRA. One important aspect of COPRA is that it is applicable all over India; it does not fall within the category of state-level health legislation. The high level of awareness among practicing doctors in Ahmedabad about the COPRA indicates that it is an important piece of legislation affecting private practice in India.

In comparison, a majority of respondents indicated low awareness about the purposes of various other legislative acts. The majority (more than 50% respondents) were familiar with only

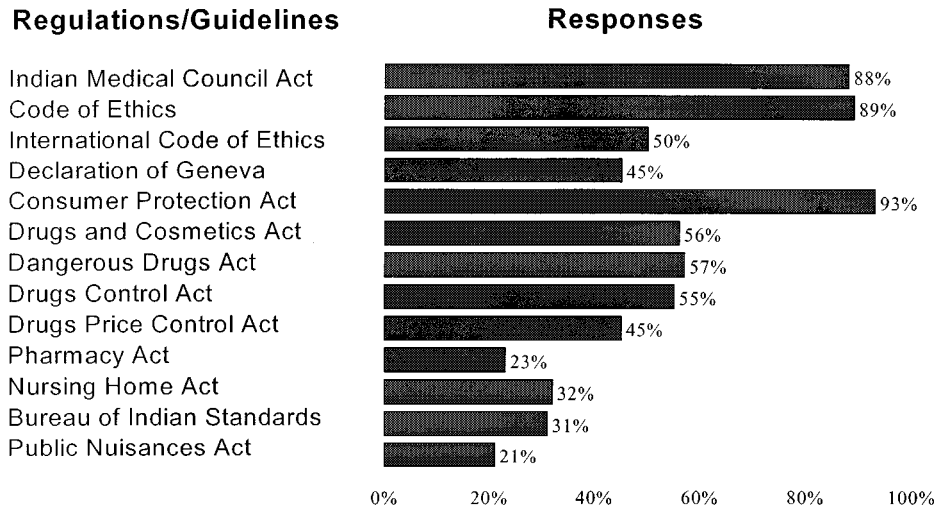

Figure 2. Provider awareness of selected regulations/declarations affecting private medical practice in India

the Indian Medical Council Act, the Medical Council of India – Code of Medical Ethics, Drugs and Cosmetics Act and the Dangerous Drugs Act. In the case of the Drugs (Price) Control Act, Pharmacy Act, Nursing Home Acts and Bureau of Indian Standards, less than 50% of doctors indicated that they were aware of these acts' main objectives.

Discussion

The efficiency and effectiveness of the private health care sector is subject to a complex set of market distortions and market imperfections, which interact with moral hazard problems of the market and information asymmetry leading to less satisfying overall performance with high costs. With its objective geared to maximize profits, and being exposed to various input market distortions, the private sector generally fails to address cost-minimizing concerns and lacks mechanisms to ensure adequate quality and access of care. Frequently cited as an example is excessive investigations, promoting more expensive care. The existing payment method used for providing services, which in the majority of cases is out-of-pocket, creates perverse incentives. Since additional diagnostic or surgical procedures are an additional source of income for the provider, it is argued that the physician is likely to maximize these services. The review of the private health care sector in India suggests that growing costs of private health care, widening equity and access problems, and concerns about quality of care, are emerging as major issues and are set to threaten the basic fabric of the health care system in India.

The presence of a strong public health delivery system is important to check many of these undesirable and unintended consequences of private sector growth. In the past, the strong presence of public health facilities in India has been instrumental in keeping many of the concerns of market failure under control. For example, the access and availability of public services critically influenced the price structure, availability and quality of service in the private sector. But with the weakening public sector and declining allocation of resources to these facilities (Tulasidhar 1993) over the years, and the inability of public systems to cope with the increasing demand of health care, the private sector has grown significantly. Today, the gap between private and public in terms of availability of technology, skills and services and ability to deliver, though at a cost, has widened significantly.

The widespread growth of the private sector, and the lack of effective mechanisms to address associated problems, is making the health sector more and more vulnerable to market failure problems and they are surfacing as obvious concerns. It is, therefore, argued that the government and professional agencies have an important role in instituting processes and mechanisms to ensure the provision of safe and appropriate health services from this sector.

One of the important grounds on which the private sector could be promoted is that of an efficient, equitable and quality conscious sector. The government has an important role in making this happen, by such means as regulation to ensure basic minimum standards of quality of care; setting up professional bodies to facilitate professional conduct; ensuring health care costs are under control and system efficiency is maintained; and by facilitating the development of insurance mechanisms to protect the population from high financial burden and to improve access.

The evidence on the lack of awareness of important and directly relevant legislation raises serious questions about the implementation of these laws. One of the areas where providers have exhibited low awareness is drugs-related legislation. For example, the Medical Council of India includes in its list of offenses and professional misconduct, against which disciplinary action can be taken, violating the Drugs Act and regulations made under it. The medical ethics code specified by the Council also includes the stipulation that physicians will help to enforce laws and regulations for public health, abiding by the provisions of State Acts like the Pharmacy Act, Drugs Act, Poisonous and Dangerous Drugs Act and other Acts, regulations made by the Central Government/State Government or local administrative bodies for public health.

Although the respondents think that these laws are effective in protecting the interests of patients, they have raised doubts about their proper enforcement. Based on evidence from case studies of regulations in India (Bhat, 1996), the effectiveness of these regulations and policies has always been a problem for the following reasons:

- The implementation and enforcement of rules and regulations have been weak.
- Since health is a state subject in India, there is no policy frame to have a common set of regulations for the private health care sector.
- There has been considerable resistance from various constituents of the private health care sector (particularly private providers) to accept in principle the applicability of certain regulations to their profession (recent examples are regulation of nursing homes in Gujarat and Bihar, and at national level, the Consumer Protection Act).
- Many regulations have not been updated and therefore have lost their relevance.
- The State does not consider concerns related to private sector growth as a high priority on the policy agenda. There are no institutional mechanisms within the government to address private sector issues.

The evidence on regulation is also replete with suggestions that regulation alone cannot be effective. It has to be supported by well-established institutional mechanisms which ensure effective implementation and strengthen the role of various agencies. These agencies should be empowered to disseminate information and should have the capacity to create peer pressure. The involvement of professional medical bodies and various agencies is quite critical in this area.

The response of the medical profession to develop rules, norms and mechanisms for self-regulation has not been adequate. The medical councils and medical associations believe these issues to be most relevant, but have not been able to evolve mechanisms to address many of them. The medical ethics code specifies that a physician practicing medicine should restrict his income to the professional services provided to the patient. The practice of fee-splitting, which is emerging as a major undesirable trend, goes against this dictum. Professional medical bodies need to educate their peers to curb these practices. Lack of information, appropriate standards and the proper administrative structure to implement existing regulations and rules all add to the list of problems.

The medical councils and medical associations have to recognize the significant increase in consumer grievances. The number of cases filed with the Consumer Redressal Commissions (district, state and national level) is evidence of growing concerns about the quality of private practice. Stakeholders must also recognize that there are certain specific areas of practice where the private sector is more vulnerable to problems of quality.

Evidence from a number of consumer grievance cases provides insights into the vulnerability of private practice in certain areas. Examination of 172 cases filed with the national and state consumer redressal commissions and other state commissions shows that 23% of the complaints relate to genito-urinary cases (including abortions and other pregnancy-related issues) and 17% have been classified as general negligence cases. Figure 3 provides details of the pattern of cases.

The above data suggests that the broad-based regulations of registration and licensing alone are not adequate. Since about two-thirds of abortion cases are handled by private providers, legislation (e.g. Medical Termination of Pregnancy Act) in this area needs further strengthening. The private sector is vulnerable here because there has been significant growth in maternity homes in many urban and rural areas over the period.

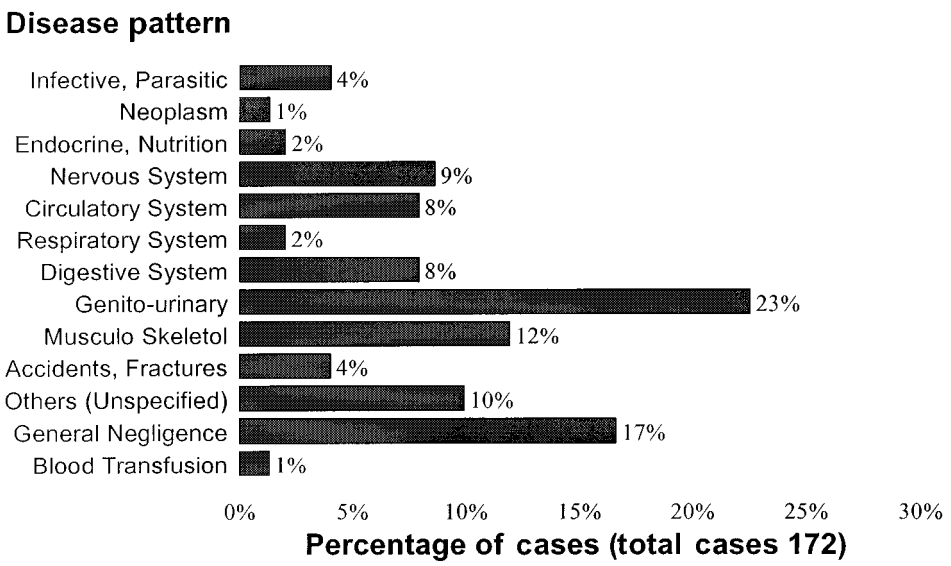

Figure 3. Consumer grievance cases under the COPRA by disease pattern

Another area needing specific attention is the development of mechanisms to minimize negligence cases. The high number of negligence cases and other unspecified problems suggest the need for an effective continuing medical education programme (CMEP). For this, the government and professional bodies need to evolve effective processes and institutional mechanisms. It is important that the CMEP mechanisms are linked with the licensing and registration renewal of medical practitioners.

The effective implementation of a CMEP will also help to minimize various other undesirable practices prevailing in the private sector, for example over-prescription. The prescription of excessive medicines and diagnostics affect the cost of health care. Since most of the expenditure in India is out-of-pocket, it is likely to affect lower income groups most.

There has been no attempt by state governments or professionals bodies to put more effective, appropriate and relevant regulations into place. A direct outcome of poor standards and the lack of proper licensing and facility-related regulation is the declining quality of service. In the first place, each state government should implement the clinical establishment legislation specifying the basic minimum physical and manpower requirements. Information about this legislation, under which all are registered, should be well publicized. Once the basic legislation is in place, information dissemination by government and professional bodies becomes critical.

There is mushrooming growth of diagnostic centres in many areas. The economies of scale of these organizations are open to question. It has been observed that fee-splitting practices are particularly rampant in these markets. The role of government should be to promote low-cost diagnostic centres to curb these practices. The price structure and information about the availability of these services should be widely publicized. The government and professional medical bodies should also explore ways to develop mechanisms to ensure the quality of services in these facilities.

The survey indicated that fee-setting practices of providers are primarily determined by cost considerations. There is very little influence of professional medical bodies on these decisions. In leaving fee-setting decisions to the providers, there is a high chance that these decisions are considerably influenced by the existing cost inefficiencies. It is important that professional medical bodies evolve some norms and appropriate practices in this area.

The survey results show that experience is considered as the most important factor in attracting patients to private health facilities. New entrants generally find it difficult to start their own practice. To help overcome this, the preference is to start a practice in well-established locations. Since most new entrants prefer to start their own practice, their practice is vulnerable to the high cost inherent in such locations. The other initial start-up costs and long gestation period further affect the total cost and thereby efficiency of providers. Their preference for well-established locations also intensifies the competition among providers within an already crowded area. The net effect of all this is an adverse impact on prices, costs and quality.

There is a strong need for regional balance in the distribution of private providers to mitigate problems caused by geographical concentration, such as inequitable access. The government could do this through appropriate licensing and registration mechanisms. At present there is no specific regulation or government policy in Ahmedabad (Gujarat), or in many other parts of the country, to guide or influence the practice location of private providers. Some state governments (e.g. Rajasthan, Punjab) have tried to attract private sector investment to desired locations by providing incentives, such as subsidizing land and other inputs in order to keep costs down. This generally helps the spread of private providers at desired locations but in a very limited manner, and the overall effect of this strategy is uncertain. Instead the limited amount of subsidies and incentives may be better spent in strengthening the licensing and institutional mechanisms to ensure the effectiveness and responsiveness of the private sector. However, the government definitely needs to pay attention towards developing appropriate infrastructure facilities in different regions.

Private provider behaviour will be considerably influenced by the overall situation prevailing in the input market and constraints imposed by other supply factors. Some of the critical factors, as identified in this paper, affecting the functioning of private providers are:

- cost of capital and financing mechanisms
- availability and cost of trained manpower
- availability and price of equipment and technology
- cost of land and building (which depends on location).

The present survey suggests that private providers are vulnerable to imperfections in all the above-mentioned areas. The prevailing conditions affect the private sector adversely. They also hamper the development of standards and have significant implications for the implementation of regulations. For example, the clinical establishment legislation in Gujarat could not be enacted because it could not address a number of problems (most of them related to above-mentioned areas) faced by the private providers. Policy interventions, whether in the form of a continuing medical education programme and/or developing regulations, must recognize these problems and design interventions accordingly. Some suggestions in this regard are discussed below.

The financial structure of most private providers is vulnerable to high capital costs. The survey results indicate that a large number of providers either finance their operations from their own funds or use a high level of debt. Providers financing their operations from their own equity generally experience a high cost of capital (Brealey and Myers 1996). This is because of high expected after-tax returns, and consequently makes equity capital the costliest source of funds. On the other hand, there are also large numbers of providers who use high volumes of debt, exposing themselves to a high degree of financial risk. This also pushes the cost of capital upwards. Invariably, the borrowing in most of these cases will be from

informal sources for which the costs will be substantially higher than the cost of funds from normal sources. In either case, we find that the financial structure of private providers in India is highly skewed in either direction (high debt or high equity), making it vulnerable to high capital costs. Such financial structures will have substantial effect on the cost of service provision and put considerable pressures on private providers to recover this cost. This gives rise to such undesirable practices as fee-splitting, over-invoicing of project costs, demand inducement, etc.

It is important to develop appropriate strategies to correct the overall financial structure of private providers in India. An initiative to start up health facilities in a joint sector (government and private) with a minimum equity stake is one option. Other alternative options such as recognizing the private health care sector as an industry and making normal channels of finance available to the sector need to be explored.

The availability and cost of hiring trained personnel is another major supply issue. The development and implementation of facility-related legislation would require private health facilities to hire trained personnel. One of the major reasons for the private sector's difficulty in implementing such legislation is the overall shortage of trained paramedical staff. With the substantial growth in private facilities, the supply of trained manpower has not kept pace. And whenever trained personnel are available, providers find that they lack exposure to the latest technologies and appropriate skills. This reflects on the standard of training, which needs immediate attention. Government needs to mandate that all hospitals with a bed capacity of 250 or more should have a training centre for nursing and other paramedical staff, and the standard of such training programmes must be regulated. At the same time, the government should work with the professional bodies to develop an effective plan to augment the supply of paramedical staff.

The private medical sector in India depends on imports for acquiring most high-tech medical equipment and technology. The economics of these investments primarily depends on the international market prices of these imports and the domestic market price structure for medical services. The latter is determined by several factors such as per capita income reflecting affordability to pay. Domestic prices for medical services are significantly lower than prices for the same procedures in international markets. This affects the economics of the capital investment decision. The pay-back period of new investment projects is generally higher in India. Further, the proliferation of new technology aggravates the problem of excess capacity in this sector. It has been observed that all these factors constrain the financial condition of a facility and therefore the sector becomes vulnerable to undesirable practices.

Thus, a policy is needed concerning the acquisition of new medical technologies. There are two dimensions to this problem. The first is related to the distortion in domestic and international prices which are determined by macro-economic variables. The second is related to the proliferation of technology, leading to excess capacity and thereby sending costs upwards. Correcting the former, distortions in prices, will require macro-economic policy responses. The latter can be handled through appropriate policy initiatives focusing on appropriate regulation and appropriate licensing mechanisms for medical equipment and technology. This can be achieved through government and professional medical bodies agreeing on a broad plan on acquiring new technologies. Institutional mechanisms need to be evolved for this. The process should also involve medical councils and medical associations. At the same time, governments can explore the possibility of purchasing clinical services from the private sector in order to meet the growing needs of the population. Given the bargaining power of the government, public–private collaborations can play an important role in keeping the costs of health care services, and many undesirable practices, under control. However, there is a strong need to have transparent institutional mechanisms and systems to handle this.

On the demand side, a number of factors influence the uncertainty and seasonal fluctuation in demand. This has been perceived as a major risk factor by providers. If these fluctuations are related to fluctuating incomes of the general population and thereby affect utilization, then the development of appropriate insurance mechanisms can reduce this problem (McPake et al. 1992). This issue needs to be explored. Professional associations should assume greater responsibility for developing an information base and helping the private sector to improve its performance. For example, they can assume responsibility for providing projections on demand-side conditions, and help the government and other stakeholders to develop appropriate supply-side strategies.

The government should examine the provider payment mechanisms in the private health care sector. The survey findings indicate that fee-for-service is the dominant provider payment system in India. This type of system has been found to create strong perverse incentives (Barnum et al. 1995); more visits, referring to more diagnostics and performing more procedures will command additional payments. Alternative approaches need to be explored to keep health care costs down. In the proposed insurance regulation bill, the provider payment system would be an important area of reform.

The government and professional medical bodies need to make a concerted effort to address these issues in a holistic manner and develop appropriate strategies to handle the various concerns. The information dissemination role of government and professional bodies, developing and strengthening the institutional mechanisms for a continuing medical education programme, developing appropriate and effective regulations, and the development of standards should assume greatest priority. As discussed, there are a number of constraints which need to be considered when developing the various initiatives. Important implementation issues to address in the near future would be: first, given the multiplicity of factors, prioritization of issues both within and outside the government; and second, the development of institutional mechanisms and management structures within the government and professional medical bodies to address public policy on the private sector.

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