PHYSICAL STANDARDS IN THE PRIVATE HEALTH SECTOR

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Introduction

In, India, provision of health care services is complex. It is provided mainly by the public and private sector. The public sector provides health services through the central government, state governments, municipal corporations and other local bodies. The private health sector consists of the 'not-for-profit' health sector. The 'not-for-profit' and the 'for-profit' health sector. The not-for-profit health sector which is very small includes various health services provided by non government organizations (NGOs), charitable institutions, missions, trusts, etc. Health care in the for-profit health sector is provided by various types of practitioners and institutions. The 'informal' sector consists of practitioners not having any formal qualifications, like the tratriks, faith healers, bhagats, hakims, vaidyas ad priests who also provide health care.

The private sector is a large and important constituent in the country's health care delivery system. It has expanded greatly in the post independence period, especially in the 1980s. Various studies conducted by organisations such as National Sample Survey Organisation (NSSO), Foundation for Research in Community Health (FRCH), Kerala Shashtra Sahitya Parishad (KSSP) and National Council of Applied Economic Research (NCAER) bring out the fact that between 60 and 80 per cent of people utilise private health facilities in the country in both rural and urban areas (NSSO, 1987, Duggal R, Amin, S 1989, Kannan, K p, et al, 1991 NCAER, 1992, George, A, etal, 1993). The findings also show that a substantial financial burden is borne by households for meeting health care needs. Compared to public expenditures on health the private household's expenditure is nearly four to five times more.

Data on sectoral distribution of doctors is not easily available. Many states do not file the required information to the appropriate authorities. A listing of health establishment and practitioners in Ahmednagar district, Maharashtra, was done by FRCH. This study identifies a total of 3060 doctors in the district belonging to all systems of medicine and 92 per cent of them were found to be practising in the private sector (including a very small percentage, in the voluntary sector). Of the total doctors identified 51 per cent were in urban areas and the rest in rural areas (FRCH, 1993). The 1981 census economic tables which list occupational distribution also show a more or less similar pattern. Thus of all doctors in the country 59 per cent were in urban areas (73 per cent for allopathic) (Census, GOI 1981).

With regard to hospitals in the country, during 1974 16 per cent of the hospitals and 21.5 per cent of the hospital beds were in the private sector and rest were in the public sector. This increased in 1990 to 57.95 per cent of hospitals and 29.12 per cent hospital beds in the private sector (CBHI, various years).

Table1: Basic Characteristics of Practitioners by Location

Practitioner Characteristics	EBA	EDA	Total
All Practitioners	41.50	58.50	100.00
Location			
a) Urban	13.64	83.87	54.7
b) Rural	86.36	16.13	45.3
Gender			
a) Males	95.45	93.55	94.3
b) Females	4.55	6.45	5.7
Age			
a) < 35 years	50.00	35.48	41.5

b) 35-45 years	36.36	35.48	35.9
c) > 45 years	13.64	29.04	22.6
# Mean Age (years)	36.00	39.00	37.7
Qualifications			
a) Accredited Degree	54.55	90.32	75.5
b) Unqualified	45.45	9.68	24.5
System Accredited			
a) Allopathic	4.54	48.39	30.2
b) Homeopathic	9.10	3.22	5.7
c) Indian Systems	40.91	38.71	39.6
d) Unqualified	45.45	9.68	24.5
Valid Registration			
a) Yes	45.45	61.29	54.7
b) No	9.10	29.03	20.8
c) Unqualified	45.45	9.68	24.5

Note : EDA - Economically Developed Area; EBA - Economically Backward Area (Figures, except #,are in percentages, columns = 100)

Table 2: General Features of Practice

Practice Characteristic	EBA	EDA	TOTAL
Type of Practice			
a)Allopathic	86.36	74.19	79.24
b)Allopathic + other	9.09	16.13	15.09
c)Ayurveda	4.55	6.45	3.77
Years of Practice			
a)upto 5 years	31.82	35.48	33.96
b)6 - 10 years	36.36	12.90	22.64
c)11 - 20 years	13.64	29.04	22.64
d)> 20 years	9.09	22.58	16.98
# Mean year's	8.45	12.00	10.50
Clinic ownership			
a)Owned	27.27	48.39	39.62
b)Rented	72.73	51.61	60.38
Multiple Practice			
a)Single clinic	68.18	70.97	69.81
b)2 or more clinics	31.82	29.03	30.19
Indoor Care Facility (ICF)			
a)Yes	50.00	22.58	33.96
b)No	50.00	67.74	60.38
c)Other clinic	-	9.68	5.66
Number of Beds as % of (ICF)			
a)One	63.64	28.57	50.00
b)Two or more	36.36	71.43	50.00
(Sample actual number)	(11)	(7)	(18)
# Mean Days/week clinic open	6.50	6.29	6.38
Laboratory Services			
a)Yes	-	6.45	3.77
b)No	9.09	3.23	5.66
c)Refers nearby locality	45.45	70.97	60.38
d)Refers nearby town/village	40.91	16.13	26.42
Telephone Facility			
a)Yes	9.09	64.52	41.51
b)No	68.18	19.35	39.62

c)Care off	22.73	16.13	18.87
Practice Caseload			
#Mean Hours per day	12.09	8.77	10.11
Practice Characteristic			
# Mean Cases per day			
-last day actuals	22.18	18.55	20.05
-during monsoon	36.50	31.12	32.61
# Mean Cases in last week	140.86	113.52	124.87
# Mean cases in last month	493.89	342.17	399.39
- old cases	160.67	140.71	148.52
- new cases	333.22	201.46	250.87
Contact with Med. Reps			
a)No contacts	27.27	6.45	15.09
b)< 5 per week	45.46	51.61	49.06
c)5 & more per week	27.27	41.94	35.85
Maintaining Case Records			
a)Yes	40.91	35.48	37.74
b)No	59.09	64.52	62.26
Sample Size (actual numbers)	22	31	53

Note : Where % totals don't equal 100 the balance are 'no - responses'
(Figures, except #, are in Percentages, columns=100)

There are reasons to believe that the number of hospitals in the private sector is much larger than the available data suggests. Health Information of India 1992, shows that there were only 1,319 private and voluntary hospitals in Maharashtra. But the Bombay Municipal Corporation listed 907 private hospitals and nursing homes in Bombay city alone (excluding Thane), on the basis of its registration data which is also an underestimate. Another instance of under reporting of data is brought out by a survey undertaken by Andhra Pradesh Vaidya Vidhana Parishad, which found the existence of 2,802 private hospitals and 42,192 private hospital beds in Andhra Pradesh in 1993 as against only 266 private and voluntary hospitals and 11,103 private hospital beds according to official figures (Mahapatra P, 1993). The survey also showed that 67.60 per cent of the private hospitals were located in urban areas (which were state capital, divisional HQ, district HQ and taluka HQ). The bed population ration in private hospitals was 6.37 beds per 10,000 population as compared to public hospitals which was 5.12 per 10,000.

The expectation of the public for quality medical care is very high, especially of the middle classes. There is a growing pressure on health care providers and professionals to maintain and improve the quality of health care with emphasis on cost effectiveness. This is reflected in a concern accorded by policy makers, planners, administrators, doctor's researchers and consumers to the aspect of quality of care in the delivery of health care services.

Quality and Standards in Health Care

There are different aspects and dimensions of quality. The Oxford English defines as a noun meaning 'degree of excellence'.

Table 3 : Practitioner Qualification vis-a-vis their Actual Practice

	Qualification											
Type of practice	**Allopathy**			**Indian system**			**Homeopathy**			**Unqualified**		
	EBA	EDA	Total	EBA	EDA	Total	EBA	EDA	Tot.	EBA	EDA	Total
Allopathy	100	93.3	93.8	88.9	50.0	66.7	50.0	100.0	66.7	90.0	33.3	76.9
Allopathy+other	-	6.7	6.2	-	33.3	19.0	50.0	-	33.3	10.0	33.3	15.4
Ayurveda	-	-	-	11.1	16.7	14.3	-	-	-	-	-	-
Cross-practice Rate	0	7	6	800	499	599	9900	9900	9900	NA	NA	NA

Sample Size	1	15	6	9	12	21	2	1	3	10	3	13

Notes : i) Where % totals don't equal 100 the balance are 'no - responses'
ii) The cross-practice rate has been calculated by indexing qualification' = 100 and dividing it by the percent who actually practice their original system., multiplying this by 100 and from the product obtained subtracting 100. For example, for the ISM qualified in the EDA :[100 * (100/16.7)]-100=499. In the case of homeopaths we have taken the denominator as 1. NA=Not Applicable.
(Figures are in percentages, columns = 100)

The Bureau of Indian Standards defines quality as 'the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs'. They use the term quality with a qualifying adjective such as 'quality level' 'relative quality'. The quality revolution with its emphasis on total quality leadership, and total quality management has resulted in its usage even in human services. Concepts of quality of life (QOL) quality enhancement and quality assurance, total quality management, quality level are currently having a significant impact on human services like health and education.

In developed countries quality as an issue has been in the forefront for management of various types of institutions. Various systems and methodologies have been developed to study different dimensions of quality. These were developed first in the industrial setting and then later in the health care sector. The same trend is being followed in India.

Quality medical care involves methodology used to asses and ensure quality, development of guidelines regarding appropriate methods of quality assessment to improve care provided and increase overall access to health care of high quality. There are systems and processes for guaranteeing quality. The measures include reducing unnecessary admissions, assessing the appropriateness of average length of stay the number of consultations and the number of days spent in hospitals. The outcomes include such things as rate of avoidable deaths, preventing hospitals infection, avoiding surgeries an invasive procedures when not necessary, and reducing the instances of post operative complications and readmissions.

Table 4: Some Observations of Condition of Clinics: Positive Features

Features Observed	EBA	EDA	Total
Noise Level (quietness)	27	29	28
Condition of wall (good)	22	61	47
Height of Ceiling (above 8 ft.)	59	81	72
Ceiling Type (cemented)	18	45	34
Condition of Ceiling (good/clean)	14	58	40
Type of Floor (tiled)	77	90	85
Condition of Floor (good/clean)	36	58	49
Natural Light (sufficient)	68	58	62
Artificial Lighting (sufficient)	23	65	47
Ventilation (adequate)	9	28	19
Seating for Patients (adequate)	18	81	55
Water Availability (present)	14	32	25
Display of Registration	5	81	13
Environment (uncongested)	36	48	43
Dustbin (present)	18	23	21
Examination Table (present)	95	84	89
Condition of Ex. Table (good/clean)	50	81	68
Medicine Tray (present)	55	77	63
Pharmacy (present)			
Sample Size (actual numbers)	22	31	53

Note: (figures are percent positive to total); EDA= Economically develop Areas;

(Figures are percent positive to total)

Avedis Donabedian (1988), the guru of quality assurance, in his contribution to the assessment of health care lays emphasis not only on the technical domain (defined as knowledge, judgement and skill of providers) but also on the interpersonal. This consists of patient communication to the physician for purposes of both diagnosis and the determination of preference for treatment and physician communication to the patient for purpose of information on the nature and management of the illness.

Table 4a: Equipment Found in GP Clinics

Equipment	EBA	EDA
Gauze swabs	9.1	83.9
Sterile pads	-	71.0
Scissors	54.5	64.5
Adult weighing machine	-	12.9
Children's weighing machine	-	3.2
Kidney tray	45.5	61.63
Antiseptic solution	13.6	90.3
Syringes	81.8	90.3
Needles	81.8	90.3
Oxygen cylinder	4.5	6.5
X-ray viewers	-	19.4
Slides	-	6.5
Test tube	9.1	45.2
Spirit Lamp	13.6	38.7
Hemoglobin test set	-	6.5
Sterliser	4.5	3.2
Bowls	22.7	51.6
Bed sheets	4.5	-
Towels and napkins	22.7	54.8
Revolving stools	-	12.9
Ordinary stools	-	51.6
Examination table	9.1	19.4
Step stool	-	9.7
Screen stands or curtains	-	3.2
Refrigerator	-	16.1
Wash basin with tap	-	9.7
Wall clocks	-	12.9

Note:(Percentage existing)

Explicit attention to the definition and measurement of quality of care on the part of the international health community can be attributed to he widespread dissemination of the writings of Bruce and here colleagues (1990) who have initiated activities to operationalise what had previously been though a rather elusive concept. Bruce has developed a conceptual framework, which defines quality of care for family planning and related reproductive services. The framework defines quality in terms of six elements and associated indicators. These are choice of method, provider-client information exchange, provider competence, interpersonal relations, mechanisms to encourage continuity and appropriate constellation of services.

The conceptual framework provided by Bruce on quality of care is rather narrowly defined. The framework does not include the health infrastructure. This dimension clearly cannot be ignored when evaluating services. Barbara Mensch (1990) mentions two parts to a comprehensive assessment of services. The first is a description of programs which are considered part of the infrastructure (i.e. equipment and facilities, staff and training, supervision, record-keeping, and

supplies). If all of these are functioning, the necessary, although not sufficient, conditions for adequate services can be said to be in place. In other words, a facility might be clean, reasonably equipped, and staffed with trained standpoint. Similarly, a family planning clinic might have a decent contraceptive logistics system with an adequate range of supplies, but not provide balance information or a full range of methods. The existence of a large supply of any one method may simply indicate that the particular method is rarely offered.

Inevitably, emphasis on quality of care leads us t discussion of standards. Standards assist us in defining the meaning of quality as it relates to health care delivery. The first step in improving quality of care is an articulation of standards that are needed for the provision of care. The key concepts for the definition of standards are firstly it notes that standards are a degree of excellence, secondly it suggests that standards serve as a basis of comparison, thirdly that standards are a minimum with which a community may be reasonably content and finally that it is recongnised as a model for imitation.

Table 4b: Type of Equipment

Equipment	EBA	EDA
Stethoscope	86.4	90.3
BP Instrument	81.8	93.5
Thermometer	36.4	48.4
Tongue Depressor	31.8	58.1
Scalpel	13.6	12.9
Speculum ENT	-	22.6
Valselum	4.5	9.7
Reflective mirror	4.5	3.2
Artery forceps	-	29.0
Auroscope	-	6.5
Dressing material	86.4	83.9
Knee hammer	-	12.9
Sutures and ligatures	9.1	58.1

Note:(Percentage existing)

Standards are classified broadly as written or explicit standards, written or implicit standards and unwritten or implicit standards. Explicit standards are defined as specific for care implicit standards are defined as usual and customary in practice. Implicit standards can also be written such as a general checklist of items. Ideally standards should be written and explicit as these allow both the data collection process and the assessment of care to be based on clearly delineated agreed upon bench marks rather than relying on the discretion of assessors (Frooks and Rachlis 1990). Donabedian (1988) states that standards may be direct towards structure, process or outcome. Structure standards apply to the things such as human, financial and physical resources. Process standards apply to activities that constitute care, service refer to the end results of care, clinical as well as non-clinical.

In 1985 the deliberation of a WHO expert committee resulted in a report entitled The Hospital and Health for All. This report highlighted the need for suitable infrastructure for the hospital and for the organisation of resources across various levels of service. It further suggested a need for an appropriate management system to be in place, that hospitals determine their scope of service with reference to a community based information system. The committee recommended that WHO develop indicators of performance a well as methods ad materials related to facility planning and maintenance for hospitals. In 1990 a WHO study group at Geneva brought out a report which recommended to WHO to continue to develop guidelines on essential procedures, technologies and standards for first referral hospital functions. It further recommended that national and international non-government organisations should improve the existing standards of management. The report went into the specific of elements of standards such as information system, referral systems, human resources, continuos monitoring and evaluation of performance,

quality of care and effectiveness and efficiency as well as its physical structure and equipment (WHO, 1990)

Table 5: Hospital Profile

	E B A	E D A	Total
All Institutions	36.70	63.30	100
Location			
a) Urban	55.6	90.3	77.6
b) Rural	44.4	9.7	22.4
Year of establishment			
a) 1968 to 1978	11.1	12.9	12.2
b) 1980 to 1990	50.0	41.9	44.9
c) 1991 to 1995	38.9	45.2	42.9
Ownership			
a) Individual prop	100	60.0	91.8
b) Partnership	-	9.7	6.1
c) Any other	-	100	2.0
Ownership of premises			
a) Owned	61.1	83.9	75.5
b) Rented	33.2	16.1	22.4
c) Long term lease	5.6	-	2.05
Functioning			
a) Only self patients	100	77.4	85.7
b) Open NH		22.6	14.3
Doctor-Owner	100	100	100
Administrator			
Qualification of doc-owner			
a) Allopathy	61.1	77.4	71.4
b) Ayurveda	22.2	12.9	16.3
c) Homeopathy	11.1	9.7	10.2
d) LMP/LSM	5.6	-	2.0
Sex of owner			
a) Male	88.9	93.5	91.8
b) Female	11.1	6.5	8.2
Age of owner			
a) < 35 yr.	50.0	35.5	40.8
b) 35 – 45 yr.	16.7	41.9	32.7
c) >45 yr.	33.3	22.6	26.5
# Average age in years	39.11	39.12	39.12
Number of Beds			
a) 3 to 5	44.4	12.9	24.5
b) 6 to 15	50.0	64.5	59.2
c) 16 to 25	5.6	19.4	14.3
d) above 25		3.2	2.0
#Average number of beds	7.55	12.29	10.55
# Total Hospitals	**18**	**31**	**49**

(Figures are percentages with column=100, except those marked #)

Many countries recognise the need for standards for hospitals. Some countries have established national standards and are continuously improving them, some of them have established national programs to monitor the compliance of individual hospitals and other types of health care facilities with national standards. Scrutiny of hospital based services is required on the grounds that a

sound organisation is necessary for the delivery of high quality clinical care and a high quality of services for the user.

There are various levels of standards. There are minimum standards, which generally represent a level of acceptability. Minimum standards area must to meet. Beyond the minimum there are desirable or optimal standards. A hospital while meeting a minimum standards should seek to achieve a desired or optimum standard. Minimum standard should be achievable by all, optimal standards on the other hand represent a degree of excellence. If good quality service involves 'conformity to specified requirements' we have to ask whose requirements and whose standards are to be met. Standards have to be developed and maintained. This is done based on collective judgments. This includes both the organisation and management standards, standards for clinical/professional practice. Governments have an important role of establishing standards for the delivery of health care services.

In 1984 a regional committee of the WHO adopted 38 targets for attainment if health for all by the year 2000. Target 31 is specially on quality, and reads " by 1990 all members states should have built effective mechanisms for ensuring quality of patient care within their health care systems". The target book included establishing methods and procedures for systematically monitoring the quality of care given to patients, by making assessment and regulation a permanent component of health professional regular activities, and by providing all health personnel with training in quality assurance. It also emphasized the need foe clear country policies on quality assurance. Such policies should state which procedures were to be assessed, how ht assessment should be organised, how health providers, politicians and consumers should co-ordinate their efforts, and what the practical consequences of quality assessment would be. Policies would have tot be formulated to ensure the involvement and cooperation of provider groups, researchers, public health authorities and consumers. No member state claimed to have established a comprehensive programme for quality assurance. Three countries had incorporated into law the requirement to include quality assurance (WHO 1990).

Table 6: Care Provided

	Number of OPD cases and Indoor admissions		
	EBA	**EDA**	**Total**
Out patient department (OPD)			
Average cases treated			
Last day (number)	34.72	43.29	40.14
Last week (number)	161.06	199.03	185.58
Indoor admissions			
Admissions last week (number)	11.06	12.06	11.68
Admissions last month (number)	44.35	40.85	42.20
Length of stay (last month) (days)	6.90	16.38	13.32
Occupancy rate (last month) (percent)	54.68	48.98	50.81

In recent times there is an increase interest not only in formulation of standards but also in the process of measurement of compliance with them. This is generally to as accreditation. Accreditation is a process wherein standards are set and compliance with them is measured. CE Lewis gives a useful working definition of accreditation as professional and national recognition reserved for facilities that provide high quality health care. This means that the particular health care facility has voluntarily sought to be measured against high professional standards and is in substantial compliance with them (Lewis 1984). In many countries accreditation systems are in place for the monitoring of standards in hospitals. The countries with the most firmly established accreditation systems are the US, Canada and Australia. In the US there were three clear phases in the evolution of the accreditation process: the era of minimal standards 1917-1965, the era of optimal achievable standards 1966-1987, and the era of performance evaluation and beyond from 1988 (Brooks 1990).

In developing countries the issue of quality assumes a different dimensions, that of accessibility and availability of health services. In India the access to service is very limited and until the present the government's attention was focused on the expansion of services, namely opening of primary health centres and sub-centres for the rural population. This expansion was carried on without giving emphasis to the quality aspect. This resulted in the government primarily concerned with meeting targets of infrastructure and humanpower. This is especially true of family planning services. The expansion of the family planning infrastructure in rural areas which the country has undertaken in the last few years will become effective only if corresponding improvement in the quality of service takes place. Perceiving quality to be luxury in resource poor settings, international donors, national policy makers and local providers have directed their attention to expansion of services ignoring for the most part the nature of these services. Not surprisingly then researchers investigating the health sector in developing countries rarely focus explicitly on the assessment of existing services (Barbara 1990)

Table 7: Staffing

	EBA	EDA	Total
Q Docs full time (allop)	14	32	46
Q Docs full time (oth. sys)	13	10	23
VC (Total)	38	52	90
Q Nurses	0	3	3
Q Technicians	2	6	8
Sweepers	11	29	40
Ward attendants	3	15	18
Receptionists	1	8	9
Others	19	17	36
Unqualified			
Nurses	15	71	85
Pharmacists	11	17	28
Technicians	0	2	2

There have been very few studies of institutional based health care services and practitioners and even fewer on the private providers of health care. The application of the concept of quality is relatively new to the field of health. In the overall scenario no significant impression has been made on the issue of quality with regards to the country's health care services. Nevertheless in a short period a number of studies have been undertaken on the aspect of quality.

Only recently there have been studies conducted on the aspect of quality. A search of the studies conducted in Indian post-1985 using the key word 'quality' identified 30 studies. This was due to the fact that quality as a term has been used rather loosely to mean many things. The various studies on quality were baseline and evaluation studies, which looked at specific components of service delivery and programmes. Majority of the studies restricted themselves to the family welfare programme. These studies were too narrow and focussed in their approach. The studies mainly dealt with the client perception of quality, utilisation, acceptance, role of demand and supply factors. These studies have shown several shortcomings in the programme operations. There were a few major studies which focused primarily on the aspect of quality To mention few, the ICMR conducted a study evaluating the adequacy of facilities, humanpower and quality of family welfare services offered by 398 primary health centres, selected across 18 states and 1 union territory (ICMR 1991). Another comparative study undertaken by the Operations Research Group in three states examined functioning of PHS/SC, its coverage, quality of service ad main bottlenecks, perceptions of people about functioning of PHC/SC and reasons for not utilising it (Khan and Tamang 1987). Recently the states on the quality of family welfare services. The study examined the perspection of clients and providers on quality of family planning services provided and the relationship between perception of quality and utilisation of service (Verman Roy and Saxena 1994).

Table 8: Qualifications of Doctors and Place of Practice

Doctors Practice	EBA	EDA	Total
Residence			
a) Same premises	83	71	75
b) does not reside	16	29	25
Doc-owners operating alone			
a) MBBS	6	10	8
b) Specialists	6	29	21
c) Other Systems of Medicine	28	-	10
Doc-owners with visiting consultants			
a) MBBS	50	6	22
b) Specialists	-	32	21
c) Other Systems of Medicine	10	23	18
# Total Hospitals	**18**	**31**	**49**

(Figures are percentages with column = 100 except those marked #)

There have been very few studies conducted on the private health sector in India. Two studies on knowledge and awareness among doctors regarding treatment of tuberculosis and leprosy were conducted in Bombay. It was found that for treating tuberculosis patients, 100 private doctors prescribed 80 different regimens, most of which were inappropriate and expensive (uplekar, Shepard 1991). In the study with regard to leprosy, it was found that there was a gross lack of knowledge and awareness among private doctors about leprosy and about the National Leprosy Control Programme (Uplekar, Cash 1991). Another study examined the use of irrational medicines and injections by the doctors in the private health sector. Out of a total of 633 prescriptions analyse from 27 private clinics it was found that 28.9 per cent were of irrational drug combinations, 9.6 per cent were for hazardous drugs, 45.7 per cent were unnecessary drugs and 26.5 per cent were unnecessary injections (Phadke et al 1995). Another study conducted by H Vishwanathan and J E Rhode on diarrhoea brought out sharply that 62 per cent of 'doctors' identified by local respondents had no formal medical qualifications (Vishwanathan and Rhode 1990). The presence of these 'doctors' is prominent especially in the remote rural areas of the country. A study conducted in Madhya Pradesh showed that of all those treated in a private facility, 52.4 per cent of the illness episodes in rural areas were treated by licentiates/RMPs and in contrast in urban areas 17.83 per cent were treated by such practitioners (George et al, 1993). The Medico Friend Circle conducted a public survey to understand patient's experiences, views an perceptions on the private health care system. The findings bring out various aspects of the private practitioners functioning in terms of waiting period, treatment provided, reasonability of charges among others (Medico Fried Circle 1990).

Table 9: Services Provided

Types of cases treated	EBA	EDA	Total
Obstretics and Gynecological	17	13	14
Medical	22	19	20
Surgical	-	26	16
Gynecological and Medical	22	16	19
Surgical and Medical	6	10	8
Gynecological and Surgical	11	-	4
All types of cases	22	16	19
# Total Hospitals	**18**	**31**	**49**

Note:(Figures,except #, are in Percentages, columns = 100)

With regards to hospital-based studies with specific reference to quality, Mahapatra and Berman conducted two studies based on secondary data of 108 secondary level public hospitals in Andhra Pradesh. The first study looked at the utilization and productivity, the second study dealt with the performance service-mix ratios (Mahapatra, Berman 1990 and 1992). Nandraj conducted a study of 24 randomly selected private hospitals and nursing homes in Bombay City. It

documents their poor condition and an absolute lack of concern for any minimum standard (Nandraj 1994).

Table 10: Examinations, Emergency and Accidents

	EBA	EDA	TOTAL
Pathology Lab Present	11	23	18
Referral for path. Exams			
a) Same village/town	61	24	35
b) Different village/town	16	-	3
Blood Bank Present	0	0	0
Referral for blood			
a) Pvt. Blood bank	11	26	20
b) Cottage Hospital (Karad)	0	10	6
c) Pvt. Teaching hospital (Karad)	67	32	45
d) Refer the case elsewhere	22	13	16
Emergency cases			
a) Treat the cases	-	3	2
b) Preliminary treat. given & refereed	11	16	14
c) Refer directly	56	19	33
d) Do not admit	6	6	6
Place refereed			
a) Refer to Pvt. Hosp..	61	32	45
b) Refer to specialists	6	3	4
Treat for minor accidents cases			
a) Treat the case	33	68	55
b) Preliminary treatment & refereed	17	6	10
c) Refer to private hosp.	11	3	6
d) Refer to public hosp.	11	-	4
e) Do not admit.	28	23	25
Treat for road accident cases			
a) Treat the case	6	26	18
b) Preliminary treatment	28	16	20
c) Refer to Pvt. hosp.	11	13	12
d) Refer to Public	6	6	6
e) Do not admit	28	39	34
Treat for domestic accident cases			
a) Treat the case	11	48	35
b) Give preliminary treatment	11	6	8
c) Refer to Private hospital	28	6	14
d) Refer to public hospital	-	6	4
e) Do not admit	50	32	38
# Total	**18**	**31**	**49**

Note : Where % totals don't equal 100 the balance are 'No - responses'
(Figures are percentages except #, column = 100)

Presently, as mentioned earlier in India there are no standards or guidelines being enforced for the running of private hospitals and nursing homes. For the running of government hospitals there are basic requirements and guidelines laid down. Various government and non-government bodies have attempted and evolved standards for minimum requirements in hospitals and nursing homes. The various government bodies which have some standards for private hospitals are the Municipal Corporation of Bombay, Delhi development Authority and Karnataka Government. The standards incorporated in the legislation's do not cover various aspects of the hospital functioning are very limited in scope of monitoring private hospitals functioning are very limited in scope of

monitoring private hospitals. In most of the places these are not being have laid down standards for hospitals ranging from 30 to 250 beds. The standards, which are laid down, are applicable to both private and public sectors. National Institute of Health and Family Welfare (NIHFW) has laid down standards but largely for 50 and more than 50 bedded hospitals and that too only for equipment. Most of the standards laid down by BIS, NIHFW etc. are meant for relatively larger hospitals located in major urban areas. In Maharashtra the government hospitals have to follow the Hospital Administration Manual for the running for the hospitals. Andhra Pradesh Viidya Vidhana Parishad has laid down standards for secondary level hospital in the government sector, which come sunder it. One of the objectives of the present study was to document and review various guidelines available in the government, NGO and private sectors for the minimum physical standards necessary for provision of health care of various kinds.

Table 11: Services Provided by Facilities

	Major OT	**Minor OT**	**Labour room**	**Sterilsation Room**
OB/GYN	5	-	2	4
Medical	3	2	-	1
Surgical	8	2	-	3
OB/Gyn & Medical	6	1	3	1
Surgical & Medical	3	-	-	2
OB/Gyn & Surgical	2	-	1	1
All care	9	3	2	3
# Total	**36**	**8**	**8**	**20**

(Figures are percentages except #, column = 100)

In the present study we selected two talukas of Statara district in Maharashtra, one economically develop and one economically backward and in them a sample of general practitioners and nursing homes/hospitals to explore their existing status and how they fit into a framework of minimum standards for provision of health care. The framework of minimum standards fore quality care have been evolved on the basis of existing information discussed as per the findings and its critique at a workshop organised by CEHAT to facilitate the placement of findings of the present study.

In developed countries quality as been in the forefront for management of various types of institutions. Various systems and methodologies have been developed to study different dimensions of quality. These were developed foremost in the industrial setting and then later in the health care delivery systems. The same trend follows in India. Industrial units took up the issue of quality and began developing quality standards in their production, sales, operations, and management systems, among others. The entry of multinationals, the opening of the Indian economy and the increased purchasing-power and consciousness in the middle class consumer have been some of the factors which have raised quality awareness. 'Quality' is the new buzz word with International Standards Organisations (ISO) certifications being chased by an increasing number of organisations. As regards health care services as yet no significant impression has been made on the issue of quality in this country.

Table 12: Operation/Theatre Labour Room

Operation theatre present	73
Area adequate	11
Labour room present	16
Condition of the walls	
Good/clean	36
Dirty and Bad	64
Height below 8 feet	2
Above 8 ft	98
Condition of Ceiling	

Clean	51
Bad/Dirty/Leaking/Paint peeling	49
Condition of Floor	
Clean	54
Dirty/dusty/Cracked/Uneven	46
Lights	
Sufficient	55
Not Sufficient	45
Operation table present	71
Lithotomy present	37
Placement of equipment	
Organized	43
Unorganized	57
Trolley for instruments present	49
Shadowless lamp present	39
Wash basin with long handle tap	
Present	35

Note: (Figures are percentages, except #, Column=100)

For the present study we had to evolve a study design and use different methodologies for collecting methodologies for collecting the required information. Thus was due to the limited amount of information and the secretive nature of the functioning of the private health sector in the country Studies on public health services are relatively easier to conduct since the data is available, though often its accuracy is questionable. The present study is exploratory in nature and mainly an enquiry into the existing nature and physical infrastructure available with the practitioners and hospitals operating in the domain of private health care.

Maharashtra is considered one of the more developed states in India. The average per capita income in the state was Rs. 3,168 during 1982-83 to 1984-85, tanking second only to Punjab. Though majority of the population is engaged in agriculture, it is one of the industrially more developed states in the country. A word of caution about Maharashtra being a more developed state in India - if the Bombay-Thane -Pune belt is excluded the state income may even fall below the average income for the country as a wholly. Thus the state is characterized by uneven development among its various regions. This pattern of development gets reflected within the districts (George and Nandraj 1993). Using the CMIE scores for districts we categorised them into developed, average, and underdeveloped. Shortlisting all the average districts and fitting other criteria like logistics, resources, short time frame, and the nature of the study we selected Satara district randomly from a final list of six districts.

Table 13: Equipment and Instruments In All Hospitals

Equipment and Instruments	Total
B.P Instruments	98
Larangyscope Adult	63
Larangyscope Child	53
Refrigerator	39
ECG monitor	10
Sterliser	65
Stretcher	51
#Total	**49**

(Figures are percentages except #, column=100)

Table 14: Equipment and Instruments In OB/Gyn Hospitals

Equipment and Instruments	Total
Suction machine	81

Oxygen cylinder with valves	52
OB forceps	81
Labour table with U-Cut Lithomy	74
Baby Weighing Machine	74
M.T.P Sets	59
#Total	**27**

(Figures are percentages except #, column=100)

The districts of Satara reflects a trend like in many of the districts in the country where some of the regions are developed and some underdeveloped. There are around 4356 co-operative societies of all sorts in the district, a large number of them being connected an dependent on the sugar industry which is controlled by politicians; 16.13 per cent of the irrigated land is used for sugarcane, oil-seeds, and cotton cultivation. From among the 11 tehsils in satara district, Karad being a developed tehsil and Patan underdeveloped. This was on the basis of broad socio-economic indicators.

As this was an exploratory study we used a combination of methodologies. Firstly from the sources such as District Statistical handbook, District Gazetter, Census documents, offices of the district health officer and the block development officer, documents of the various medical councils and associations, etc we collected basis information on the district. There was paucity of information on private health facilities with the government bodies, including the DHO's office. No compilation of their number, size, care provided, facilities available was available in the district. There was no information on the number of doctors practising in the district. Registration of the hospitals in the district was not being done in spite of the fact that in Maharashtra under the Bombay Nursing Home Registration Act (BNHRA) of 1948 it is mandatory to register with the local body.

The team had to make use of various handbooks, and membership lists compiled by different local associations of doctors, chemists and medical representatives. These were available for the tehsil of Karad and Patan town. These were deficient in many respects since some of them had only names of their members, some had restricted it to the system of practice, others had names of only those who had paid the subscription. There was inadequate information on the doctors practising in the Indian systems of medicine.

From the lists provided by the various local associations and the Medial council List, the lists were cross-checked and in addition key informants such as drug stores, senior doctors, government health officials, etc were contacted for updating the list. After this exercise a final list was complied of the practitioners an institutions in the two selected tehsils of the district. Care was taken to include practitioners from different systems of medicine and specialties. The names of those persons practising without any qualifications were collected through informal discussion with key informants it the village such as shopkeepers, PHC doctors, private qualified doctors, local voluntary organisations etc. Our attempt was to cover around 50 practitioners and 50 hospitals and nursing homes from both the tehsils. This was considered a fairly sufficient sample to understand the functioning and examine the physical standards available in them.

Table 15: Select Equipment and Instruments For Surgical Hospitals

Equipment and Instruments	Total
Shadowless Lamp	65
Oxygen Cylinder with Valves	56
Lahem Table	26
Electro cautrey unit	39
Ventilator	13
Defribilator	9
X-ray viewers	57
X-ray machines	39

Autoclave	91
Boyles apparatus	0
#Total	**23**

(Figures are percentages except #, column=100)

The final sample consisted of 50\3 practitioners and 49 hospitals. In Patan tehsil 18 hospitals and 22 practitioners were covered under the sample. In Karad which was the developed tehsil 31 practitioners and 31 hospitals and nursing homes were covered. The selected sample in the two tehsils was roughly proportionate to the actual number as found in our compilation. The sample with regard to practitioners consisted of those qualified and also those not qualified and from various systems of medicine, to whatever extent possible in the same proportion as in the population, and different regions in the tehsil. It was done in order to capture the variations in size and spread across various socio-economic divisions within the tehsil.

The sample for both the tehsils was from the tehsil headquarters, the villages where the hospitals were located and one PHC village and its subcentre(SC) village and a remote village in each tehsil. Care was taken to interview those doctors practising in remote villages which had no public health facility. In the rural sample care was taken to select GP's from the PHC village, SC village and a remote village of the particular SC village. This gave us a diverse sample. An effort was also to interview doctors during bazar day in the village bazar. (The terms hospitals and nursing homes have been used to synonymously and henceforth will be mentioned in the text as hospitals.

The data collection was undertaken during January, February and March 1995. As this was during the winter season the doctors were relatively, free since the morbidity load according to them is fairly low during this season. The tools of data collection consisted of a structured interview schedule along with an observation schedule and checklist for equipment.

Contrary to our expectations the response of the doctors practising and of hospital owners was quite positive. Initially there was some apprehension like some were under the impression we were from the income department, many of them were exposed to a research study for the first time an did not know how to react, a few were openly hostile and did not give the information etc. But this was mainly in Karad taluka. The positive side was that many doctors especially in smaller towns and the persons who feared and were worried were those practising without any qualification. In one instance the respondent who did not have proper qualification informed his brother who was a sub-inspector in the Bombay police to make inquiries about us.

A one-day workshop was held on 'Minimum Physical Standards for Private, Hospitals and Nursing Homes' in Bombay for researchers, government officials, doctors from the public and private hospitals from urban and rural areas. A consultant was appointed to evolve minimum standards for the hospitals taking into consideration various aspects of functioning. A background document 'Proposed Minimum Standards for Private Hospital and Nursing Homes: Upto 30 bedded unit providing Medical/surgical/Maternity care was discussed in the workshop. Various valuable suggestions and comments where emerged have been incorporated in the final document. The document evolved was an independent excersise from the field-based study. While efforts were made to collect substantial information from the field based study ad compare it with the standards evolved, it was not possible to examine all the aspects of the standards evolved due to the nature of the study. (Eg Information was collected on the source of supply of water and its storage but we did not collect information on the amount available per day).

There were various problems faced by the researchers during he conduct of the study. The most important was that of inadequacy of data on the size, functioning and nature of the private health sector. This was compounded by the fact that there few studies available on private health facilities and the few studies that were available dealt with only the urban setting. This becomes more frustrating when neither the government nor medical associations/council have any kind of information on this sector. The second problem related to the size of the institutions, which

ranged from the three beds to 500 bedded hospitals. This made the task of categorising different aspects related to physical standards between two extremes difficult for analysis. It was difficult to study such a wide variation in the present study. The third problem was in terms of defining the various units under study and their various functions. Practitioners in the district ranged from the road side quick fix operator to the super specialists. In between we had persons claiming to be doctors and practising. Further there were those qualified in a formal system and those trained by tradition. A related problem was with reference to defining qualitative terms for the observation schedule. We have come to the conclusion that the observations are subjective since we did not standardize various definitions such as clean, adequate proper etc.

Another problem was with the instruments and their numbers. We went into details of certain instruments such as scissors, scalpel sets, gauze, kidney trays. In some of the bigger hospitals they would laugh at us for asking such questions, since many of them were having it by the dozens but on the other hand smaller setups would not have them in sufficient quantities. Another problem was that all the researchers involved in the data collection were from the social science background. It was difficult for ht researchers to grasp especially when clinical terms were used and with the names of, drugs, instruments and equipment. We feel that a study of this kind should have a person with a medical background. Two other major limitations of the study was that it covered only aspects of physical standards (which included staffing) and that it was not possible to check records of the hospitals in most cases.

Private General Practice: Nature and Status

Provision of routine medical care for a wide range of diseases and symptoms is mostly in the private sector. While government health centres exist across the length and breadth of the country they have failed to provide the masses with the basic health care which the latter expect. The scope of this document does not permit a detailed analysis as to why the government health care has failed. It will suffice to say that a fairly large investment by the public sector in health care is begin wasted due to improper planning., financing and organisation of the health care delivery system- the national public sector health expenditure today is Rs. 10,00 crore per year being spent on 4800 hospitals, 11,110 dispensaries, 23,000 PHCs, 140,000 subcentres and various preventive and promotive programs, including family planning. The state employs 125,000 doctors and also runs 108 medical colleges. But the services provided by the state do not meet the expectations of people and as a consequence the latter are forced to use private health care whatever be its quality and/or effectiveness.

Private medical practice flourishes almost every where. The range if providers are also varied, from the herbal and witch doctor to the modern unqualified or quasi-qualified 'quack', and to the qualified practitioners of different systems of medicine, many of whom also indulge in quackery. There is no firm data available on the entire range of practitioners. Even the medical councils of the various systems of medicine have failed to maintain a complete register of active practitioners. The census is another source but the latest available census data for occupations is of r1981. Hence estimates from various studies or indirect extrapolations are the only methods for fixing a proximate size of medical practitioners.

Our estimate based on indirect extrapolation using the assumption that all doctors (compiled from lists of the various medical councils) minus government doctors is equal to the private sector. Today there are about 11,25,000 practitioners registered with various medical councils in the country and of these 125,000 are in government service (including those in administration, central health services, defense, railways, state insurance, etc). This leaves 10,00,000 doctors of various systems of medicine floating in the private sector an done can safely assume that atleast 80 per cent of them (800,000) are economically active and about 80 per cent (640,000) of the latter are working as individual practitioners. Apart from this there are as many unqualified practitioners as estimated by the UNICEF/SRI-IMRB study in Uttar Pradesh, and if we accept this estimate then the total medical practitioners active becomes about 13,00,000, that is one such practitioner per 750 population (Hema and Rhode 1994). Another study in Ahmednagar district showed that the district had 3060 active medical practitioners (FRCH 1993). Ahmednagar being an economically

average developed district, if we multiply this figure by 452 districts we get approximate figure of 13.8 lakh practitioners for the country as a whole which is quite similar tot he earlier estimate. The latest census figures were not available, and in Satara district we were unable to do a complete listing of medical practitioners because of the limited objectives of the present study and the constraint of time and resources. Apart from his no other information about the size of the health sector is available. This problem of poor availability of information, especially about he private health sector calls for intervention to make the various medical councils and the local bodies more accountable and to improve their recording and information systems.

Unlike the estimate which was possible in the Ahmednagar study mentioned earlier the limited scope of the present study did not allow the time nor had there sources to throw our nets wider to collect information on the size of the private health sector. The objectives of the study are limited to the existing status and nature of the practice and how it conforms to accepted minimal standards or quality of care. In Satara district from the two sample units, one a developed taluka and another a backward taluka, 31 and 22 medical practitioners were selected, respectively, to explore the nature of general practice.

Profile of Medical Practitioners

The number if medical practitioners in the EDA is expected to be much larger than those in the EBA since medical practitioners tend to concentrate in developed markets and our sample reflects that. The same is true for the urban/rural distribution in the two areas, though this may be closer to the actual proportion. The EBA is almost wholly rural except for the taluka headquarters which we have classified as an urban area. The EDA has well-developed urban centres and thus even has a private teaching hospital, making for a much large concentration of medical practitioners in urban centres. Urban concentration of health care providers is a well known fact - 59 per cent of the country's practitioners as per 1981 census (73 per cent allopathic) are located in cities, and especially metropolitan ones (Census 1981). For instance, of all allopathic medical graduates in Maharashtra 60 per cent are located in Bombay city which has only 11 per cent of the states population (see table 1).

This selective concentration of health care providers then becomes a major concern to be addressed to, especially since the health care marker is supply induced and when people fall ill they are wholly vulnerable and forced to succumb to the dictates of such a market. The consequence of this is that access to health care provides gets restricted to those living in urban and developed pockets and the vast majority of the rural and EBA populace have to make do with quacks or travel to the EDAs for satisfying their health care needs. In fact, studies have shown that those living in EBAs spend about as much on health care as those in EDAs (Duggal Amin 1989; George et al 1993). And hence relocation can become economically viable for qualified private practitioners. Thus the state and the local bodies must intervene to restrict the number of practitioners from setting up practice in EDAs. This calls for some locational policy, which can establish a relative socio-geographic equity.

The gender and age distribution show a very male concentration in both the areas and as one would expect a larger proportion of women practitioners are located in the EDA. Macro data also show that the proportion of women practitioners are located in the EDA. Macro data also show that the proportion of women doctors is abysmally low. For instance the 1981 census reveals that women constitute only 10.8 per cent of all doctors (4 per cent in rural areas). This overwhelming male dominance of the medical profession has had its adverse impact on health care of women, especially of care specific to women. Further the women who become doctors also tend to locate themselves in the larger urban centres.

As regards age distribution of the active doctors, the mean age of the sample is 37.75 years and 42 per cent of them are below 35 years. The mean age if the EDA practitioner is higher and this is perhaps indicative of the push factor in EDAs as a consequence of over concentration which is forcing new practitioners to move gradually into EBAs (half of EBA practitioners are below 35 years) in larger numbers. If this is happening it is a welcome trend and a policy to encourage

youngsters to move into underserved areas and conversely a policy to discourage new entrants into the profession from setting up shop in overserved areas would be helpful the local governments have an important role to play here.

When we launched on this study the first question which confronts us was how t determine who was a qualified practitioner. After much debate and conclusion we decided to 'qualify' those practitioners who had obtained a degree or diploma from a recongnised university or statutory board of allopathy, homeopathy, ayurveda, unani and dissha. All others who did not fit the above definition have been regarded as unqualified and this includes these called group of registered medical practitioners (RMPs), unless of course the latter had an actual registration with a recognised board or council (some very old practitioners in Maharashtra, for instance do have such a registration).

Thus in our sample we have 'recognised' two categories, one called 'accredited degree or diploma' and the other called 'unqualified'. We would like to note here that by labeling this group as unqualified we are in no way commenting on their abilities and skills in providing care. Our perception being coloured by modern science we have only made categories to facilitate our anlayses.

In our sample of practitioners we see that one-fourth of them are unqualified and the difference between the EDA and EBA on this count is very large. The EBA has unqualified practitioners nearly five times that of EDA. This reflects not only the fact that the unqualified are largely located in EBAs but also that EBAs have weak markets (low purchasing power) and probably no concern at all for regulation. The EDAs with large concentration of practitioners are also well developed markets and some unwritten regulatory mechanisms operate due to forces of demand and supply but as is well known these forces vis-à-vis the health sector are very weak because health care has always been a supply induced market.

Of all the qualified practitioners in the total sample 40 per cent are allopaths 52.5 per cent from Indian systems and only 7.5 per cent from homeopathy. Between the EDA and EBA again a vast difference as per the pattern discussed above prevails. Thus in the EDA of all qualified 53.6 per cent are allopaths and 42.9 per cent from Indian systems, and in the EBA conversely only 8.3 per cent are all allopaths (over six times less than EDA) and a whopping 75 per cent from Indian systems.

Further, we see that those qualified in modern medicine tend to locate in EDAs and in our sample the EDA has six times more allopaths than the EBAs. The Indian system practitioners which is the largest group of practitioners in the country, as also in our sample, is more or less equality distributed in the EBA and EDA. The 1981 census also indicates a similar pattern - the allopaths in urban areas (EDA) are three times more than in the rural areas (EBA), and the Indian system doctors distribution is more or less similar, 55 per cent in rural areas and 45 per cent in urban areas (if we exclude government doctors from the census data then the similarity with our sample becomes very close) (census 1981). The findings of the Ahmednagar study also support the findings in Satara district. IN Ahmednagar 77 per cent of allopaths were in EDAs and 23 per cent in EBAs and for Indian systems the percentage distribution was 68 and 32, respectively (FRCH 1993). And in our sample of all the allopaths 94 per cent were in EDAs and of all Indian systems 43 per cent were in EBAs.

The diversity and complexity discussed above becomes a serious concern in the context of the fact that an overwhelming majority of them, including unqualified, are practitisng allopathy. Thus, a major question which needs to be addressed is how do we view practitioners of different systems of medicine, how should they be distributed in the population ad what type if care should each group be allowed to administer. While recognising the advantages that each system may have, overall it is generally accepted that modern medicine deserves the priority it commands today and hence it should become the basis system of medicine (until another system establishes its 'superiority') and hence medical education must produce a single stream of basic doctors

trained in modern medicine and those who wish to acquire knowledge and skills of other systems should have the necessary facilities to pursue those as electives or specialisations. We strongly feel that this is an important issue of concern for policy makers. If some steps in the direction suggested are not undertaken with due seriousness then the existing system hierarchies (with allopathy as dominant and homeopathy and ayurveda qualifications serving as a legitimacy to practice modern medicine or as alternate to allopathy for the patient when the latter fails to cure) will continue and quality care or care with basic minimum standards will never be achieved.

Related to having an accredited qualification is the question of registration with the appropriate authority and renewing the registration periodically. Legally speaking registration gives the qualified practitioner the right to practice medicine and it is the duty of the concerned authority to assure the consumers of such health care that no practitioner without appropriate registration is treating patients. For instance, the Maharashtra Medical Council registers all doctors qualified in allopathy and permits them to set up medical practice in the state. Similarly each state or region has such a council. The Indian systems and homeopathy also have their respective councils and give registrations for practising the relevant system of health care. The registrations given are not permanent and are usually for five years and it is responsibility of every practitioner to renew their registration at the appropriate time failing which the council can prevent the practitioner from practising. It is well known that the various medical councils have been lax and negligent and have not been performing their statutory duties. As a consequence the medical practitioners have also become lax and a large number of them are practising today not only without proper registration but also without the requisite qualifications. All this then becomes a threat to the patient who is thrown at the mercy of 'doctors' who may not have the necessary skill and practice with half baked knowledge. Thus, even something for which there is a law and an authority to administer it, it is being neglected. It is the responsibility for the State to see that its own constituted authorities are carrying on with their responsibilities effectively.

In our study sample we found that only 55 per cent of the practitioners had the appropriate registration and even from among all the qualified practitioners only 72.5 per cent were registered. Between the EDA and EBA the former had 61 per cent of practitioners registered and the latter 45 per cent and from those qualified the percentages for the two areas were 68 and 83, respectively. Of course, as mentioned earlier the EBA has nearly five times more unqualified practitioners than the ED. All this clearly demonstrates both the laxity of the concerned authorities and the unconcern of the medical profession for proper standards and quality care for treatment of patients. The health care administration needs to pull up its bootstraps on the one hand and the concerned medical professionals must take a lead to put their own house in order on the other hand.

When people fall ill the first line of contact is usually the neighborhood general practitioner (GP) or some government facility like a dispensary or primary health center or hospital. That the GP is the most sought atter health care provider has been confirmed now by a number of studies, and this ranges from 60 per cent to 85 per cent of all non-hospital care which patients seek (NSSo 1987); Duggal, Amin 1989; Kannan, 1991; NCAER 1992; George et al 1993). But we have already seen above that many GPs are there is the market place, and more so in the EBAs where the majority of the population resides, who may be more a risk than help to patients seeking care (see Table 2).

While modern medicine has simplified treatment of most illnesses and symptoms to a few drugs (even making many of us self-prescribes) its commercialization has brought in more problems than the benefits it has created. The pharmaceutical industry and the medical equipment industry have both caused much harm to the character of the medical profession. Their marketing practices have lured a large majority of medical professionals 9 and not the unqualified quacks alone) to increasingly resort to unnecessary and irrational prescriptions of drugs, the overuse of diagnostic tests, especially the modern ones like CAT Scan, ultrasound, ECG, etc and uncalled for references to specialists and supers specialists (for all of which a well organised kickback system operated - the givers and beneficiaries calling it commission!). these issues, while the

they fall within the context of standards and quality of care, are extremely difficult to study and hence only anecdotal information is available. However, through indirect methods some amount of information may be derived as was done in one study in Satara district of drug supply and use. This study lends credence to the anecdotal evidences we so fare had about unnecessary and irrational drug prescription and use. We conclude that there is a very high proportion of use of unnecessary, irrational, hazardous drugs and unnecessary injections, especially in the private sector, to the extent that 69 per cent of expenditure on prescriptions is a waste (Phadke et al, 1995). In the present study such an exercise has not been possible because has not been possible because we have focused largely on the supply side and not looked at usage.

In the preceding section we discussed the qualifications of the practitioners and even mentioned that the non-allopathic and unqualified are in reality largely practising modern medicine even when they are not trained for it. This fact is clearly borne out amongst the samples practitioners where we see that as many as 79 per cent are practising only allopathy as against 30 per cent of the doctors in the sample who are qualified allopaths. If we add to this those practising allopathy along with their own system in which they are trained then the total of those actually practising allopathy becomes 94 per cent. The trend in both the EDA and EBA is similar with the EBA having a slightly larger proportion of those who practice allopathy alone - in the context of the fact that it has only 4.5 per cent qualified allopaths amongst its practitioners the difference assumes added significance.

When we cross-tabulate the actual practice data with the practitioners actual qualification we see that almost all the allopaths practice only allopathy, only 14 per cent of the ayurveds practice solely their own system, none of the homeopaths practised their own system independent of allopathy and 77 per cent of the unqualified are practising purely allopathy. The patterns in the EDA and EBA are similar. A prosy cross-practice rate reveals that the qualified allopaths have an insignificant volume of crosspractice as against the ISM and homoeopath practitioner. As suggested in the preceding section something needs to be done at the policy level about this crosspractice and the large presence of unqualified practitioners. Action has to begin from reorienting medical education to create a basic doctor in rational modern medicine and strengthening regulation and control of medical practice by getting the regulatory bodies to become active and committed to the cause of quality and standards of health care.

The mean number of years of practice in the overall sample is 10.5 years. There is a significant difference between the EDA and EBA with the former having practitioners with a greater number of years of experience as compared to the latter. While the EBA has 68 per cent practitioners with 10 or less years of practice the EDA has 64 per cent of its practitioners who have worked for over ten years. In the sample 60 per cent of the practitioners are working in rented clinics. In the case of EBA practitioners 73 per cent have rented clinics in comparison to 52 per cent in EDA. Further, in both the areas about 30 per cent of the practitioners run clinics in more than one place. (For those having multiple clinics all data pertains to the clinic in which the practitioner was interviewed). One-third of the practitioners had indoor care facilities and in the EBA this facility was ther in one-half of the clinics. The difference I understandable because the EBA is less likely to have nursing homes and hospitals and hence individual practitioners do maintain some provision for day-care (usually saline drips) or for observation of a serious patient. In the EDA this is not necessary because of easy access to hospitals and nursing homes. Of all those who have indoor facilities half of them have one bed and the other half two or more beds. The EBA has more of the former and the EDA more of the latter. As regards laboratory services very few doctors in either area have them and they usually refer to the nearest one available. In the EDA a large majority of the doctors have their own telephone connection whereas in the EBA very few do. A large majority of the clinics are open six days of the week, however the EBA has many clinics open for all seven days of the week, and the average number of hours the clinic is open everyday is 10.11 hours with a large difference between the (EDA about 9 hours) an the EBA (12 hours) (in fact two practitioners from the EBA stated that their clinic runs for 24 hours!) The differences due to location are as expected and reflects the nature of supply of services in the two areas, clearly establishing that the supply is related to potential of making profits. Thus, the EBA

does not have laboratory services because a minimum volume of such cases perhaps does not exist or more properly cannot be induced in the EBA market whose purchasing capacities are much more limited to make such an investment in the EBA viable.

The number of cases or patients seeking care from practitioners has been recorded in a number of different ways so that it can give us some methodological insight. Thus, we first recorded the number of cases treated on the preceding day, then questioned about cases (incidence) and old cases continuing from the earlier month into the last month (the latter two together constituting from the monthly caseload), and the number of cases treated per day during the monsoon months. Since case records are not maintained properly by most practitioners the figures most often are those reported by the practitioner him/herself. Therefore, recall plays its role. Our assessment is that the preceding days figures and previous weeks figures are the most accurate and the others are approximate. Wherever possible monthly figures were checked against records available at the clinics and our judgment is that the monthly figures are quite accurate, though an underestimate. Of course, the most appropriate would have been to sit through the entire work-day of the practitioner and record the actual attendance, but this has not been possible due to the limited time and resources on our hands.

The data on workload show that practitioners are seeing 20 patients per day, 125 patients per week and 400 cases per month. During the monsoon months they estimate that their work load increases by 63 per cent of a daily average load of 32 patients. The difference between the EDA and EBA is substantial. The EBA practitioner is treating on an average more patients than the EDA practitioner. This is perhaps due to the fact that EDA has a greater concentration practitioners as against the EBA. This then allays the apprehension of doctors that patients are not available in the backwards and rural areas THE EBAs and rural areas have as much as demand for health care as the EDAs and hence there is much sense in implementing a policy of location restriction in overserved areas and locational encouragement in underserved areas through, for instance, fiscal and tax related measures Further, the question of a lack of purchasing power, which is very valid, can also be overcome by involving the qualified practitioners into a state sponsored universal health care system which assures them a clientele and income through a system of family practice. For the latter to be successful a statute backed locational policy for setting up medical practice becomes essential. Along with this regulation, standards and quality care are necessary features.

Visits by medical representatives (MRs) to clinics and other health care establishments is an important feature of the health sector economy. MRs from pharmaceutical companies are the lifeline of the drug industry on the one hand and a source of information or misinformation for the practitioners on the other hand. The network of MRs is so well entrenched that even in the EBA as many as 73 per cent of practitioners are visited by them. As is expected the EDA based practitioners are subjected to more frequent contacts by the MRs because of the medical market and especially the drug maker being concentrated in urban and developed areas. With the irrational and unnecessary drug prescriptions being very high, and the role of the pharmaceutical industry in perpetuating this calls for a mechanism for rational continuing medical education for medical practitioners on the other hand.

Another disturbing features of medical practice is the lack of maintaining case records by the practitioners. Only 38 per cent of the practitioners had some resemblance of a record but even these were not case records in the true sense. The records were usually just what medicines they administered and the charges to be paid by the patient and it was mostly the latter so that they could keep track of which patient owed them what most of these were maintained in dairies or notebooks. This is again an important area of policy concern and practitioners must be legally made liable for maintaining a proper record of patients diagnosis, treatment given, prescriptions, charges levied, etc. Proper records are a must both form the perspective of ht patient as a right to information as well as for the doctors own protection to evaluate his/her interventions especially when there are charges of negligence and malpractice against him/her.

While carrying out he field study the investigators were provided with as observation checklist to record qualitative aspect of the clinic. The listing in Table 3 gives the percentage of clinics which 'scored' positive on the feature observed. For instance noise level refers to clinics which were not noisy or condition of floor refers to clean and well kept and type of floor means tiled or display of registration means 'Yes' or pharmacy means it exists as a separate entity etc. The findings are self-explanatory and show that overall conditions are not very conducive and that the EDA clinics are little better off in some of the features. To improve these general conditions the role of a regulatory authority becomes manifest.

There is an urgent need to have provisions as to where, how, what features etc. a clinic must have in the interest of good medical practice and that of the patients.

Like the observation checklist we had a checklist for equipment and instruments. This list was develop in consultation with a number of medical practitioners in Bombay. While this list may not be complete it may also have some items which sound frivolous to ask ands enlist. Nevertheless, this list may be assumed to be a proxy minimum requirement that any Gp clinic must meet. The results are evident in Table 4. Again one sees that certain crucial requirements are lacking and the difference between the EDA and EBA in some cases is sharp. Overall the existing situation is quite bad - things like sterlisers, thermometers, examination table, weighing machine, bed sheets, towels and napkins, wash basin, etc, are grossly lacking. Again a need to formulate a minimum list of equipment which a general practice clinic must have in the interest of good medical practice becomes. Clinics without the agree upon basic minimum must not be granted permission to be set up.

Hospitals

Care in institutions like hospitals could be for the purposes of examination, diagnose of diseases, curing, surgical interventions, recuperating, maternity and related purposes, among other. One can broadly classify these institutions on the basis of their (I) bed strength, (ii) locations, (iii) ownership and (iv) services and facilities provided. Institutions range from those having five beds or below to corporate hospitals having more than 500 beds, which are set up by corporate bodies as business ventures. In addition to these are companies who have their hospitals to provide medical care to their employees. Lastly there are hospitals which are run by NGOs and private charitable trusts.

There is under-estimation of data and the quality of data available from official sources is unreliable. There are reasons to believe that the number of hospitals in the private sector is much larger than what the available data suggests. Health Information of India 1992, claims that there were only 1,319 private and voluntary hospitals in Maharashtra, and the Directory of Hospitals brought out by the ministry of health listed 1,174 hospitals in Maharashtra (CBHI, 1992). But the Bombay Municipal Corporation listed 907 private hospitals in Bombay City alone (excluding Thane), on the basis of its registration data which again is an underestimate. Another instance of under reporting of data is brought out by a survey undertaken by Andhra Pradesh Vaidya Vidhana Parishad, which found the existence of 2,802 private hospitals and 42,192 private hospital beds in Andhra Pradesh in 1993 (Mahapatra P 1993). According to data available with GOI as on January 1 1991, however Andhra Pradesh only 266 private and voluntary hospitals and 11,103 private hospitals beds level of the total number of health establishments. The data available is of the same quality as available at he state and national level. The Directory of Hospitals, 1988 lists only 47 hospitals and 1728 beds in Ahmednagar district (CBHI 1988). A listing of hospitals in the district in 1992 found that there were 274 institutions having indoor facilities. Out of them 18 were government run, 224 from the private sector and 12 from the voluntary sector (FRCH 1993). Primary health centre were not included in the listing. Data for hospitals from official sources is very scanty and unreliable. Many states do not file the required information and the data that is provided is incomplete. Due to inadequate and unreliable nature of data, planning for the health system becomes inaccurate and faulty.

Location

There were 49 hospitals involved it the study sample. From the EDA 31 hospitals were selected and 18 hospitals from the EBA. As expected nearly three fourths of the institutions were located in the urban areas, which consisted of the two tehsil head quarters and one other town. Majority of them were from the EDA area namely Karad. This was due to the fact that geographically the town of Karad is well connected with other surrounding districts and tehsils, located on the national highway and boasts of a private teaching hospitals. In the EBA more than 50 per cent of the hospitals were located in urban area of the developed taluka. This is reinforced by other studies, which looked at he location of private hospitals. A listing of institutions in Ahmednagar found that out of the 274 institutions 201 were located in urban areas and 71 were in rural areas of the district (FRCH 1993). Another study conducted in Andhra Pradesh found that the highest concentration of hospitals homes were in the towns and cities of the advanced districts. Even in the backward districts they were restricted to major towns. The private sector functions in areas where there is a paying capacity. The growth of the private sector in health care is directly related to the level of economic development. This link is logical because it is economically developed areas which not only provide the market for these services but also the surplus to invest in commercial enterprises (Baru R 1993).

The majority of the hospitals were established during the post 1980s and these were in the urban areas of he developed district. Between 1968 to 1978 there were 12.2 per cent hospitals established, between 1980 to 1990, 44.9 per cent hospitals were established and 42.9 per cent hospitals between 1991 to 1995. More than eighty percent of the hospitals in the sample were established in the 1980s and 1990s period. During this period the private sector increases its presence and this growth took place at a rapid pace. In the Ahmednagar study too it was found that out of 75 hospitals in the sample 51 percent of them were established between 1983 to 1991 (FRCH 1993). The growth of private hospitals can be noticed at the National level also. In India, during 1974, 16 per cent of the hospitals and 21.5 per cent of the hospital beds were in the private sector and rest were in the public sector. This proportion increased in 1992 to 57.42 per cent of the hospitals and 32.22 per cent hospital beds in the private sector (CBHI, various years). This clearly bears out that the private sector increased its presence and became more dominant in the last tow decades even in the hospitals sector.

The findings with regard to the type of management revealed that 92 per cent of them were individual proprietorship, 6 per cent were tun on partnership basis, one was on a cooperative basis by doctors. All the partnership run hospitals were in the EDA. Three-fourths of the hospitals in the sample were operating from premises, which was owned by themselves. The doctor was the administrator/sole incharge of the institution for all the hospitals I the sample. The Ahmednagar study found that out of 75 hospitals 93 per cent of them were individual proprietorship and 4 per cent were run on partnership basis. With regards to ownership of premises 81 per cent of the premises were owned by the doctor running it and in only 19 per cent it was on a rental basis (FRCH 1993). The findings on the type of management and ownership of premises clearly brings out the fact that many of the medical practitioners are progress towards building their own hospitals. The phenomena of individual proprietorship of the hospitals by the doctors has been due to the increasing number of doctors passing out from the medical colleges and the fast returns on the investment in the health field. There is an increasing tendency to start self-owned hospitals.

More than 90 per cent of the doctors running the hospitals were males. There were only four female doctors in the sample running the hospitals independently. In most cases the team found that it was the husband and wife team running the hospitals. The phenomena of husband and wife running the hospital is quite unique. Discussions with the medical fraternity and a glance at he matrimonial advertisements reinforce the fact that it he medical profession spouses look out for the partners with a hospital in mind, therefore the specialization of the spouse become an important factor. This requires a more detailed sociological study.

Further examination revealed that in 85.7 per cent of the hospitals patients were admitted only by the doctor-owner and only in 14.3 per cent of the hospitals other doctors could admit their

patients. This was more so in the EDA, whereas in the EBA all of them were admitting only their own patients. The findings on the type of management, ownership for the premises and admission of patients, clearly brings out the fact that many of the medical practitioners progress towards building their own hospitals.

With regards to the qualification of doctor/owner it was found that 71.4 per cent of them were qualified in the allopathy system of medicine. Out of them 10 were MBBA. 10 were specialists with MD or MS and five were MBBS wit some diploma. Out of the 10 specialists nine were located in the EDA of the district. This shows that the doctors with specialization prefer to set up hospitals in a developed area. There were 16.3 per cent and 10.2 per cent of the doctors who were trained in ayurveda and homeopathy systems of medicine respectively. Those qualified in other systems of medicine were located in the EBA of the district. All the hospitals owned by doctors from other systems I the sample were also providing care in the allopathy system. This is of serious concern, as these doctors qualified in homeopathy and Indian systems of medicine are not trained in allopathy. This has taken place since there are no monitoring mechanism or a regulatory authority operating in the country.

None of he hospitals were being registered by local authorities or nay authority for that matter. In Maharashtra hospitals are legally required to register with the local governing authority under the Bombay Nursing Home Registration Act (1949). The act is applicable to the whole of Maharashtra, however it is not being implemented. Many of the local bodies did not have enough information regarding the Act and the bye-laws were yet to be formulated in some. Except for Delhi, Bombay ad Karnataka none of the states have any rules, laws, regulations or even data for private hospitals and nursing homes. In Delhi there is the Delhi Nursing Home Registration Act (DNHRA). 1953. In the above states the various act are not being implemented for various reasons. In most of the states in India there are no regulations for private hospitals and nursing homes. Despite having one of the largest private health sectors in the world, providing 70 per cent of care in India, the fat that it should function practically unregulated is a matter of grave concern.

The average number of beds was 11 beds per hospitals in the study sample. In the EDA the average was 12 beds as compared to 8 beds in the EGA. More than fifty percent of the hospitals had a bed strength in the range of 6 to 15 beds. Nearly a quarter of the hospitals in the sample had a bed strength between three to five beds, most of them were located in the EBA. It was generally found that the majority of the hospitals located in the EBA had bed strength of less than 15 beds. In the studies conducted in Bombay and Ahmednagar it was found that the average bed size of a private hospital/nursing home was 10 (FRCH 1993; Nandraj 1994). This raises issues of efficiency and effectively of running smaller hospitals.

All the hospitals in the study had OPDs. This was either for a new cases, consultancy or for follow-up of the indoor treatment provided earlier. The average number of OPD cases was collected for the previous day, last week and last month. On an average a hospital was attended to 40.14 OPD cases per day and 185.58 cases in a week. The OPD attendance was higher in the EDA by about 2 per cent. Data collected for the month could not be compared with actual records and hence there were substantial problems in reporting by the respondent because of the long recall period and hence the data is not usable. The higher attendance of OPD cases in the EDA is because people prefer to come to the developed/urban area in case of major ailments as specialists are available mostly in the EDA and also due to referrals by practitioners and institutions from the rural areas. (see table 6).

Admissions for indoor patients on an average in a hospital for the last week worked out to 11 and for the last month 42 patients. The average length of stay of patients in the hospitals was about 13 days for patients under care during the month. The number of days in EBA. This could be because the investment in the EDA for setting up a hospital is higher and therefore to maximize returns the hospitals would be keeping the patient for longer period of time. This could also be that for major ailments, illnesses, surgeries, etc people prefer to for to hospitals located in the

urban centres in the developed areas which have specialists and other supportive structures such as blood bank, laboratories and diagnostic facilities. The other reasons are that many patients come from the periphery to the developed areas for treatment. The occupancy rate for the month was on an average 51 per cent of the beds available in the sample hospitals.

There are diverse categories of personnel who run the hospitals. They could be broadly classified as those with qualification and those without any formal qualification. The personnel could be further classified based on the role they perform. The personnel could be further classified based on the role they perform. There are doctors, nurses, paramedics, pharmacist, various types of technicians to handle the equipment and conduct various tests and the other supportive staff like ward boys, ayahas, receptionist, typist, security personnel etc. The availability of human power in the hospitals is of prime importance. Data regarding the staffing pattern was collected with regards to the various categories of personnel employed their number and their qualification. Data on visiting consultants was also collected. The full time staff generally consisted of medical and paramedical workers. They were doctors, nurses, technicians, wardboys/ayahbais, receptionists and others. These are the staff mainly running the hospitals and those whoa re employed in the institutions (See Tables 7 and 8)

Information on the place of residence of the doctor was collected. It was fund that out of 49 hospitals 38 of the owner doctors resided in the same premises and of those not residing in the same premises nine stayed at a walking distance of five to 10 minutes from the hospital. There were a total of 69 full time doctors in the hospitals of the sample. 46 were qualified in modern medicine and 23 were from other systems of medicine. More than 60 per cent of them in the EDA. Out of a total of 23 doctors trained in other systems 57 per cent were in the EBA.

Out of a total of 49 hospitals 39 per cent of them were being run by the doctor-owner without any assistance from other doctors or visiting consultants; of these only half had any specialist qualifications and one-forth of them (all from the EBA) did not have a qualification in modern medicine. An issue if grave concern is that as many as 29 per cent of the hospitals were run by doctors trained/qualified in the other systems of medicine and were providing care using allopathic cures. The BNHRA (1949) clearly mentions that the hospital should be under the management of a qualified medical practitioner or a qualified nurse. It was generally found that MBBS doctors prefer to practice with the aid of either a full time doctor or a visiting consultant. In Bombay it was found that out of 24 hospitals and nursing homes only 1 hospital had employed a post graduate doctor, whereas 10 of them had doctors trained in other systems. Few hospitals had provision for the doctors to be present round the clock. Majority of the nursing homes utilized the services of visiting consultants (Nandraj 1994).

The majority of the consultants were anesthetists, followed by surgeons and those trained in general medicine. The services of the visiting consultants were mainly utilized by the those performing surgeries. In the EBA the visiting consultants would visit the hospital on a particular date. Usually the planned operations were performed on that day. Most of the hospitals that utilized visiting consultants were located in the EDA. In some hospitals the consultants were called when required and in some they were visit on a regular basis.

Qualified nurses were in short supply. There were only three qualified nurses in the entire sample. Most of them were employing unqualified nurses. They were usually women with some formal education trained by the doctors themselves. Many doctors claimed that the nurses trained by them were also assisting them in the OT. Informal discussions with them also revealed that they were performing other tasks in the hospitals such as sweeping, dispensing of drugs etc.. Their hours of work was very long and working conditions miserable, w it h poor remuneration. The BNHRA(1949) states that a maternity home should have on their staff a qualified mid-wife. In the study in Bombay it was found with regard to qualified nurses only seven had employed them that too only one nurse each. Most of them had employed unqualified nurses who were either trained by the doctor or had receive training for about three to six months from various private

training institutes which have also sprung up to meet the needs of private hospitals (Nandraj 1994).

Other staff present in the hospitals were technicians, ward attendants, sweepers and a category of personnel who performed all the jobs (OT etc.) in the hospital. Thus generally we see that employment of qualified staff is an issue of serious concern in private hospitals. It was generally found that the availability of staff was in adequate and many of those employed were not properly qualified. May hospitals functioned with doctors trained in other systems of medicine who administer allopathy treatment in these hospitals.

There have been very few studies conducted on the services and facilities provided by private hospitals. Data and information with regard to the functioning of private sector is not forthcoming. Figures regarding cases treated, diagnosis, type of treatment provided, amount charged etc. are not easily obtainable from private hospitals (See Table 9).

Hospitals providing care could be of a general nature providing basic care or interventions or may be restricted to certain specialties. They could be classified as medical, surgical, obstetrics and gynecological, pediatric, orthopaedic, ophthalmic, etc, or a combination of them. The services could include maternity, medical termination of pregnancy (MTP), baby care, intensive care services (ICU), surgery, day care and other types of services. The responses with regard to the services provided by the hospitals for indoor admissions were open ended under the broad categories of medical, surgical and ob/gynaecology (maternity). This gave a broad spectrum of type of cases admitted in the hospitals. One of the hospitals were providing care in certain specialties such as orthopaedics. Ob/gyn were single largest service provided in the sample hospitals with 55 per cent of hospitals providing the service. It was provided exclusively by 14 per cent of the hospitals. The main services consisted of care for normal delivery, cesarean, hysterectomy, abortion, MTP, DNC, infertility, STD, etc. The major services being provided was medical care. The cases treated were mostly for illness such as tuberculosis, malaria, gastroenteritis, typhoid, diarrhea, dysentery, jaundice, asthma and various kinds of fevers such as rheumatic fever, enteric fever, etc. Medical services were being provided exclusively in 20 per cent of the hospitals. In 18 per cent and 8 per cent it was being provided alongwith ob/gynaecology and surgical services respectively. Hospitals providing exclusive surgical services comprised 16 per cent of thew sample, all of them located in the EDA.

Minimum Standards

In this section the findings of ht study are compared in the context of the standards develop for private hospitals having a bed strength of upto 30 beds. As mentioned earlier in the review of literature private hospitals in the country function without any regulation or adhering to standards. Standards are not prescribed nor are being enforced either through legislation, bye-laws or professional organizations/associations.

One of the major objectives of the study was to evolve standards for the smaller private hospitals functioning in small towns and rural areas. A medical doctor, well-aquainted with hospital administration was consulted to evolved standards for private hospitals having a bed strength upto 30 beds. A document on the physical standards for private hospital was prepared. This was based on existing material, visits to private hospitals, discussion with owners of hospitals and other doctors. These standards covered minimum requirements for running a hospital in terms of services offered, space, humanpower, facilities available with regard to equipment and instruments. They were evolved keeping in mind both scientific principle as well as patients minimum comfort.

For the smooth functioning of the hospital certain basic requirements are needed. The environment and infrastructure related factor and mainly those connected with the physical structures of the unit, its location, size, condtion, etc. It also includes communication facilities such as phone, ambulance for the transport of patients, continuous power and water supply et. The facility related factors are operation theatre, labour room, sterilization room, equipment and

instruments. In this section the findings have been presented under the following broad heads: Functional programme; humanpower available; facilities available and space requirements and equipment and instruments.

Functional Programme
As per the physical standards would for hospitals certain basic facilities need to be provided by the hospitals irrespective of the services being provided.

Emergency Care: The standards clearly mention that every hospital should be in a position to provide first aid to stabilise a victim's condition for transportation to a higher or appropriate service in case of emergency. The hospitals should provide emergency services for cases such as road, minor, domestic accidents and those involving medico legal victims. In the field bases study we found that private hospitals were unwilling to treat emergency cases and those involving accident cases. Only 2 per cent of the hospitals were treating emergency cases. In 14 per cent hospitals preliminary treatment was given and the cases were referred elsewhere. IN 33 per cent hospitals the cases were not admitted at all but referred directly. In the EBA majority of the hospitals do not admit the patients. With regard to accidents cases majority of them treat only accidents, which are of a minor nature. They do not admit cases involving road and domestic accidents. The doctors like to play it sage and not get involved in legal cases. This is in clear violation of the ethics of the doctors and amounts to negligence on the part of the doctor. They do not want to even provide first aid and refer the patient to bigger institution. Most of them complain that it is because of the various formalities and procedures involved.

Pathology: There should be provisions in hospitals or nearby location for minimum pathological tests to be performed on site or at a nearby facility. Of all hospitals only 18 per cent had facilities for pathological examination. These were mainly located in the EDA and they did routine tests such as blood, urine and stools. Most of the hospitals were referring the patients to the private laboratories in the same village or town. In another district we found that persons from the laboratory would come and collect the samples from the hospitals and bring back the results. This practice was not found in Satara district (FRCH 1993). Hospitals located in the rural areas of EBA were referring them to laboratories located in another village or town.

During data collection we found that many of the pathology laboratories functioning in small towns or bigger villages had unqualified persons to conduct the tests. Many of them conducting the tests were no qualified to carry out the tests recommended. In rural area it would be quite appropriate for the hospitals to have facilities for conducting certain basic tests, otherwise proper treatment in such cases could be delayed. It would also save the patient unnecessary transport to an urban areas. The referrals for examination mainly for diagnostic tests has had an unhealthy nexus. There is a system of cut system operating. In Bombay, Pune, Nasik the laboratory/diagnostic centre gives a cut of the charges to the doctor referring the patient. We were not able to collect information on this aspect in our study, as the data was not forthcoming. In Karad informal discussions with the doctors revealed that sonography was being conducted rampantly. At one end in rural areas there are no facilities to conclude simple tests in the hospital sand at the other end we find unnecessary investigation and examinations being conduct ore out of economic reasons.

Blood transfusion facilities should be available within half to one hour for hospitals providing maternity and surgical services. None of the hospitals had facilities of a blood bank. Blood banks were located in Karad and Satara towns of the district. In Karad it was available in the private teaching hospital and the cottage hospital run by the zilla parishad. Majority of the hospitals informed the patient to make their own arrangement in procuring blood for either surgery or transfusion. This is major problem, which the patients face as in case of a planned surgery or transfusion the patient has to run around to procure blood. In case of emergency the problem is worse especially in the rural areas.

Power Supply: For the running of a hospital the availability of power supply is of utmost importance. Those of non-availability of continuos power supply a generator should be available. With regard to continuous power supply it was found that only in a quarter of the hospitals power was available without any interruption. Only 24 per cent of the hospitals in the sample had of a generator. The non-availability of continuous power supply to the hospital is of concern as in certain situations it could mean life and death for a patient. The patient is put to a grave risk if power fails.

Water: The majority of he hospitals were getting water which was supplied by the municipal/grampanchyat authority and were having storage facility either underground or in an overhead tank.

Communication: Three fourths of all hospital had facilities of a telephone but in the EBA only 50 per cent of them did so. A quarter of the hospitals in the sample were depending on a care-off number which was either in a nearby shop or situated close to the hospital. Hospitals which did not have the facility if a telephone were mainly located in the rural areas of the EBA. The non-availability of a telephone for the functioning of hospitals is of serious concern as in case of an emergency the communication between the doctor and the supportive services and with patients is not present.

None of the hospitals had an ambulance available. Many of the doctors expresses surprise at this question as it was assumed by them that transportation of the patients was their own responsibility. It should be the responsibility of the hospital to provide proper transportation facilities to the patients especially when they are referred by the hospitals. In the EBA most of the patients were transported in a passenger jeep for those who could afford. IT became more difficult for patients from rural areas and in case of emergencies. In the EDA, private ambulances were available. It is possible for some of the smaller hospitals to come together and have one which could be used by all of them. This would be more beneficial in the areas due to the transpiration facilities being poor. Communication and transport facilities should be a prerequisite foe the functioning of a hospital as the time for providing any intervention is often critical.

Fire fighting: Fire fighting equipment was available only in 22 per cent of the hospital, all of them were located in the EDA.

Humanpower

As seen earlier the availability of staff for the running of hospitals was grossly inadequate, and of those available majority of them were not qualified. Here we examine the availability of humanpower especially doctors and nurse in relation to he standards laid down.

Dotors: The standards laid down were that there should be one duty medical officer available for every 20 indoor beds or part thereof in every eight hour shift. In hospitals where the qualified owner doctor is resident the requirement could be scaled down.

As note earlier 39 per cent hospitals were functioning without either a full-time doctor or a visiting consultant for the care of the patients. Assuming that the owner-doctor is resident, it is nor possible for him/her to work for 24 hours. The situation could become dangerous when the doctor foes out of the hospital even for a short while. A qualified doctor is a must for proper care to be provided to the patient. Out of the 19 hospitals which were run by the doctor-owner alone, 29 per cent of the hospitals were being run by doctors trained in other systems and in 10 per cent they were operating alone. Out of a total of 14 hospitals who had a doctor-owner qualified in other system, two of them were providing services in ob/gyn and medical services, three hospitals in medical care, and one surgical services. It was surprising to note that one of the doctors was providing care in surgical services. The practice of doctors trained in other systems of medicine providing care in Allopathy system of medicine needs to be banned.

Such a situation has arisen because there are no regulations for the functioning of private hospitals in the country. Anybody can open hospitals and start practicing and providing care even if they are not qualified to do so. With regard to the doctors who were only had a MBBS it was found that three of them were providing care for all type of services and two were providing care in Medical services, four for all types of care and three each for only ob/gyn and ob/gyn alongwith medical care. There were e46 qualified allopaths totally available on a full time basis who were either employed or running the hospitals themselves. If we exclude the owner-doctor of the 19 hospitals functioning without any full-time doctor we find that only 27 doctors were available on a full time basis for the rest of the 30 hospitals. This practically means that full-time doctor's were not available on a shift basis.

This clearly brings out the fact that the hospitals are not willing to employ full-time qualified doctors to tun them. The hospitals were being run on a purely individual basis by the doctors with some additional help from other persons trained by them. This has come about due to the fact that there is no accountability and monitoring system. It is also because the practice of medicine had become commercialized with fast returns by not employing qualified staff. Visiting consultants were not taken for analysis as many of them were visiting more than one hospital.

Nurses: The standards specify that there should be one nurse available for every seven beds for every eight-hour shift. For hospitals offering maternity facilities and emergency surgical facilitates tow more operation theater nurses are required on shifts. In the study the availability of qualified nurses it was found to be grossly inadequate. Only two hospitals had three qualified nurses between them. There were 14 hospitals who did not have either qualified or unqualified nurses. Comparing them with the recommendations of nurses to be available in shifts, even taking into consideration unqualified one the availability was only two nurses per hospital.

Facilities and Space

A hospital should have certain basic facilities in terms of various zones for the provision of treatment. These are the waiting room, dispensary/pharmacy counter, bathrooms, consulting room, dispensary/pharmacy counter, toilets, bathrooms, wards among others. Those providing surgical services and maternity services should have a operation theatre, labour room, steralisation room, changing room etc.

Location and Premise: In the study it was found that 82 per cent of the hospitals were located near a market place and in 66 per cent f them were functioning from an independent building. The noise level in 55 per cent of them was disturbing. The location and premise of the hospitals play a very vital role in the recuperation of the patient. The location of the hospitals near a market place is due to the fact that the hospitals would like to attract patients and be known. Hospitals in a residents living in the locality. For instance, the garbage is dumped in the common dumping ground, which could lead to spread of infections. Also the residential premises are not suitable for hospitals as the purpose for a dwelling place is much different from that providing indoor care, with its wards, OT, etc. The study in Bombay found that 62.50 per cent of the private hospitals were located in residential premises, and 12.50 per cent were run from sheds which had roofs of asbestos, tin, etc. and only 8.33 per cent had an independent building of their own. The study further found that 50 per cent of the hospitals were located in poorly maintained buildings or were in a dilapidated condition. In Bombay the development rules clearly state that hospitals should have a separate entrance, as it would not disturb other residents of the building.

Pharmacy/dispensary: Usually in private hospitals it is generally found that in the waiting room premises a place is there for the dispensing of the drugs. In 27 per cent of the hospitals there was a place for a dispensary but the space provided was inadequate for all the hospitals.

Waiting Room: The waiting and consultant room are the first entry points of a patient visiting the hospital. Certain basic facilities need to be provided for the comfort of a patient during his waiting. The environment of the waiting room should be such that it is pleasing and not congested.

Various types of information need to be provided. The doctors qualification, registration in the council and schedule of fees should be displayed in the waiting room prominently. There should be a proper system of entry to the doctors chambers. Enough space should be provided for the patients and their relatives to sit in the waiting room. The environment in the waiting room was reasonable in 82 per cent of the hospitals.

Consultancy Room: The majority of the hospitals in the sample had facilities of a consulting room. Only in 28 per cent of the hospitals the area was found to be adequate. It was found that 92 per cent of those who had a consulting room an examination table was present and of those 71 per cent of them had a bedding on the examination table. Further it was revealed that in 47 per cent of the consulting room did not have a stool and only 8 per cent had a revolving stool. The privacy of the patient is of utmost importance, especially for women. There was neither a screen, curtain or a separate room for examination of patients in 65 per cent of the hospitals. The privacy of patients was not given adequate importance. It is imperative that there is a wash basin and with sufficient water as the doctors examine different types of patients. A wash basin with tap was available in 59 per cent of the hospitals, and out of these 49 per cent there was no water available in the wash basin.

Wards: The major standards recommended were that wards should be separate for male and female patients, infectious and non-infectious diseases. There should be a minimum of 70 sq ft per bed with a minimum distance of 2.2sq ft between centres of two beds. The findings with regard to the wards was conducted of the general ward. This was done since the observation of a special room would provide a different picture all together. It was generally found that the walls in the wards were bad, there was sufficient light, width of the door less than 3ft. etc. Three fourths not having a screen and of those having a screen it being dirty in nearly most of the hospitals. Surprisingly in 71 per cent of the bed pans were not available.

Beds: The conditions of the beds were observed. It was found that in only 6 per cent of the hospitals the space per bed was adequate. IT was generally noticed that private hospitals as far as possible try to make the maximum utilisation of the space available. This is done usually at the cost of patient comfort. The space between beds is kept as little as possible so that more number of beds could be put. In 57 per cent of the hospitals the distance between two beds was less than 3 ft. This has other consequence such as the spread of various infectious diseases within the hospital. In more than 50 per cent of the hospitals the bedsheets and pillows were found to be dirty.

Operation Theatre (OT)/ Labour Room: Hospitals providing surgical services should have a facility of an operation theatre. The standards evolved do not differentiate between a minor and Major OT. Out of 49 hospitals providing care in surgical services either exclusively or in addition with ob/gy and medical services. All of them had OT facilities except one hospital which was providing services for surgical and medical care.

There were 27 hospitals providing care in ob/gyn services seven exclusively, others in addition to medical and surgical services. One hospital neither had an OT or a labour room. In 13 hospitals there were no facilities for a labour room, the OT was used as a labour room. In four hospitals facilities were present of only for a labour room. All the four hospitals were providing services in addition with medical services.

Though most of them had facilities of an OT the area was found to be adequate in only 11 per cent of the hospitals of those who had an OT. The minimum requirement of space for the provision of an OT was 350 sq. ft. The conditions of the OT and labour room were very bad. OT table was present in only 71 per cent of the hospitals having OT facilities. Shadowless lamp was present in only 39 per cent of them. Lithotomy was present in 37 per cent of the hospitals. In 64 per cent of them the wall were dirty and in 49 per cent the ceiling was leaking and paint peeling off. The equipment was kept in an unorganised manner in 57 per cent of the OTs.

Equipment and instruments: Standards evolved have dealt with equipment and instruments in great detail inclusive of minor and major instruments and their number. The standards have recommended that a portable ECG facilities should be available in all hospitals round the clock. For the purpose of analysing of availability of equipment and instruments, not all of them were analysed. It was generally fund that a ECG monitor which is a must for all hospitals, only 10 per cent of them had the facility. A steriliser was available in 65 per cent of the hospitals. The findings reveal that basic instruments and equipment was available in more than 50 per cent of the hospitals.

In hospitals providing OB/gyn services nearly a quarter of them did not have equipment and instruments, which was a basic requirement. A oxygen cylinder was available in 52 per cent, labour table in 74 per cent and a suction machine in 81 per cent of the hospitals. With regards to hospitals providing surgical services only 39 per cent had a x-ray machine. Oxygen cylinder was available in 56 per cent of the hospitals. A Electro cautrey unit was available in 39 per cent of the hospitals. None of them had a Boyles apparatus.

The availability of equipment and instrument is of vital concern. They should be available in sufficient numbers and be in a working condition. They should be well maintained. In the study we found in some hospitals that they were kept in a unorganised manner. Basic cleanliness was not maintained with regard to the equipment and instruments. Except for a few hospitals who were storing them in a cupboard with glass doors, most of them were leaving it open. In some hospitals there was more than sufficient number of smaller instruments such as needless, thermometer, dressing material, kidney trays, scalpel sets. In fact the respondent would laugh at the investigators for asking such things but at the other end there were hospitals which were not even these in sufficient quantity.

The private health sector has grown to be the most dominant one in the health sector. This sector's growth has been unregulated, unplanned and is not accountable. This has taken place been the state did not regulate, monitor to make the private health sector accountable. Surprisingly, the functioning of this sector has been the least examined. There are no minimum standards laid down for the functioning of private hospitals in the country. Even where regulation exists in paper it is not being implemented. In the US where the market forced play a dominant role, there are stringent regulations for setting up private practice and hospitals.

Action needs to be taken to bring reforms in this sector. The suggestions made are not exhaustive, but touch upon some areas which need to be looked at in prevailing situation. As a first step people should be made aware of their rights and duties vis vi the health care system. With regard to private practitioners, the state and medical councils should ensure that only properly qualified person's practice. The government should endeavor through licensing and encouragement and proper geographical distribution of practitioners and hospitals in the country to prevent over-concentration in certain areas. There should be regular medical and prescription audits. The renewal of license and registration should be dependent on it. Records should be maintained properly and the patients should have access as a matter of right. Minimum standards and requirement for various types and kinds of hospitals and nursing homes should be laid down and be made legally bindings.

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Table1: Basic Characteristics of Practitioners by Location

Practitioner Characteristics	EBA	EDA	Total
All Practitioners	41.50	58.50	100.00
Location			
a) Urban	13.64	83.87	54.7
b) Rural	86.36	16.13	45.3
Gender			
a) Males	95.45	93.55	94.3
b) Females	4.55	6.45	5.7
Age			
a) < 35 years	50.00	35.48	41.5
b) 35-45 years	36.36	35.48	35.9
c) > 45 years	13.64	29.04	22.6
# Mean Age (years)	36.00	39.00	37.7
Qualifications			
a) Accredited Degree	54.55	90.32	75.5
b) Unqualified	45.45	9.68	24.5
System Accredited			
a) Allopathic	4.54	48.39	30.2
b) Homeopathic	9.10	3.22	5.7
c) Indian Systems	40.91	38.71	39.6
d) Unqualified	45.45	9.68	24.5
Valid Registration			
a) Yes	45.45	61.29	54.7
b) No	9.10	29.03	20.8
c) Unqualified	45.45	9.68	24.5

Note : EDA - Economically Developed Area; EBA - Economically Backward Area (Figures, except #,are in percentages, columns = 100)

Table 2: General Features of Practice

Practice Characteristic	EBA	EDA	TOTAL
Type of Practice			
a)Allopathic	86.36	74.19	79.24
b)Allopathic + other	9.09	16.13	15.09
c)Ayurveda	4.55	6.45	3.77
Years of Practice			
a)upto 5 years	31.82	35.48	33.96
b)6 - 10 years	36.36	12.90	22.64
c)11 - 20 years	13.64	29.04	22.64
d)> 20 years	9.09	22.58	16.98
# Mean year's	8.45	12.00	10.50
Clinic ownership			
a)Owned	27.27	48.39	39.62
b)Rented	72.73	51.61	60.38
Multiple Practice			
a)Single clinic	68.18	70.97	69.81
b)2 or more clinics	31.82	29.03	30.19
Indoor Care Facility (ICF)			
a)Yes	50.00	22.58	33.96
b)No	50.00	67.74	60.38
c)Other clinic	-	9.68	5.66
Number of Beds as % of (ICF)			

a)One	63.64	28.57	50.00
b)Two or more	36.36	71.43	50.00
(Sample actual number)	(11)	(7)	(18)
# Mean Days/week clinic open	6.50	6.29	6.38
Laboratory Services			
a)Yes	-	6.45	3.77
b)No	9.09	3.23	5.66
c)Refers nearby locality	45.45	70.97	60.38
d)Refers nearby town/village	40.91	16.13	26.42
Telephone Facility			
a)Yes	9.09	64.52	41.51
b)No	68.18	19.35	39.62
c)Care off	22.73	16.13	18.87
Practice Caseload			
#Mean Hours per day	12.09	8.77	10.11
Practice Characteristic			
# Mean Cases per day			
-last day actuals	22.18	18.55	20.05
-during monsoon	36.50	31.12	32.61
# Mean Cases in last week	140.86	113.52	124.87
# Mean cases in last month	493.89	342.17	399.39
- old cases	160.67	140.71	148.52
- new cases	333.22	201.46	250.87
Contact with Med. Reps			
a)No contacts	27.27	6.45	15.09
b)< 5 per week	45.46	51.61	49.06
c)5 & more per week	27.27	41.94	35.85
Maintaining Case Records			
a)Yes	40.91	35.48	37.74
b)No	59.09	64.52	62.26
Sample Size (actual numbers)	22	31	53

Note : Where % totals don't equal 100 the balance are 'no - responses'
(Figures, except #, are in Percentages, columns=100)

Table 3 : Practitioner Qualification vis-a-vis their Actual Practice

	Qualification											
Type of practice	**Allopathy**			**Indian system**			**Homeopathy**			**Unqualified**		
	EBA	EDA	Total	EBA	EDA	Total	EBA	EDA	Tot.	EBA	EDA	Total
Allopathy	100	93.3	93.8	88.9	50.0	66.7	50.0	100.0	66.7	90.0	33.3	76.9
Allopathy+other	-	6.7	6.2	-	33.3	19.0	50.0	-	33.3	10.0	33.3	15.4
Ayurveda	-	-	-	11.1	16.7	14.3	-	-	-	-	-	-
Cross-practice Rate	0	7	6	800	499	599	9900	9900	9900	NA	NA	NA
Sample Size	1	15	6	9	12	21	2	1	3	10	3	13

Notes : i) Where % totals don't equal 100 the balance are 'no - responses'
ii) The cross-practice rate has been calculated by indexing qualification' = 100 and dividing it by the percent who actually practice their original system., multiplying this by 100 and from the product obtained subtracting 100. For example, for the ISM qualified in the EDA :[100 * (100/16.7)]-100=499. In the case of homeopaths we have taken the denominator as 1. NA=Not Applicable.
(Figures are in percentages, columns = 100)

Table 4: Some Observations of Condition of Clinics: Positive Features

Features Observed	EBA	EDA	Total
Noise Level (quietness)	27	29	28
Condition of wall (good)	22	61	47
Height of Ceiling (above 8 ft.)	59	81	72
Ceiling Type (cemented)	18	45	34
Condition of Ceiling (good/clean)	14	58	40
Type of Floor (tiled)	77	90	85
Condition of Floor (good/clean)	36	58	49
Natural Light (sufficient)	68	58	62
Artificial Lighting (sufficient)	23	65	47
Ventilation (adequate)	9	28	19
Seating for Patients (adequate)	18	81	55
Water Availability (present)	14	32	25
Display of Registration	5	81	13
Environment (uncongested)	36	48	43
Dustbin (present)	18	23	21
Examination Table (present)	95	84	89
Condition of Ex. Table (good/clean)	50	81	68
Medicine Tray (present)	55	77	63
Pharmacy (present)			
Sample Size (actual numbers)	22	31	53

Note: (figures are percent positive to total); EDA= Economically develop Areas; (Figures are percent positive to total)

Table 4a: Equipment Found in GP Clinics

Equipment	EBA	EDA
Gauze swabs	9.1	83.9
Sterile pads	-	71.0
Scissors	54.5	64.5
Adult weighing machine	-	12.9
Children's weighing machine	-	3.2
Kidney tray	45.5	61.63
Antiseptic solution	13.6	90.3
Syringes	81.8	90.3
Needles	81.8	90.3
Oxygen cylinder	4.5	6.5
X-ray viewers	-	19.4
Slides	-	6.5
Test tube	9.1	45.2
Spirit Lamp	13.6	38.7
Hemoglobin test set	-	6.5
Sterliser	4.5	3.2
Bowls	22.7	51.6
Bed sheets	4.5	-
Towels and napkins	22.7	54.8
Revolving stools	-	12.9
Ordinary stools	-	51.6
Examination table	9.1	19.4
Step stool	-	9.7
Screen stands or curtains	-	3.2
Refrigerator	-	16.1

Wash basin with tap	-	9.7
Wall clocks	-	12.9

Note:(Percentage existing)

Table 4b: Type of Equipment

Equipment	EBA	EDA
Stethoscope	86.4	90.3
BP Instrument	81.8	93.5
Thermometer	36.4	48.4
Tongue Depressor	31.8	58.1
Scalpel	13.6	12.9
Speculum ENT	-	22.6
Valselum	4.5	9.7
Reflective mirror	4.5	3.2
Artery forceps	-	29.0
Auroscope	-	6.5
Dressing material	86.4	83.9
Knee hammer	-	12.9
Sutures and ligatures	9.1	58.1

Note:(Percentage existing)

Table 5: Hospital Profile

	E B A	E D A	Total
All Institutions	36.70	63.30	100
Location			
a) Urban	55.6	90.3	77.6
b) Rural	44.4	9.7	22.4
Year of establishment			
a) 1968 to 1978	11.1	12.9	12.2
b) 1980 to 1990	50.0	41.9	44.9
c) 1991 to 1995	38.9	45.2	42.9
Ownership			
a) Individual prop	100	60.0	91.8
b) Partnership	-	9.7	6.1
c) Any other	-	100	2.0
Ownership of premises			
a) Owned	61.1	83.9	75.5
b) Rented	33.2	16.1	22.4
c) Long term lease	5.6	-	2.05
Functioning			
a) Only self patients	100	77.4	85.7
b) Open NH		22.6	14.3
Doctor-Owner	100	100	100
Administrator			
Qualification of doc-owner			
a) Allopathy	61.1	77.4	71.4
b) Ayurveda	22.2	12.9	16.3
c) Homeopathy	11.1	9.7	10.2
d) LMP/LSM	5.6	-	2.0
Sex of owner			
a) Male	88.9	93.5	91.8

b) Female	11.1	6.5	8.2
Age of owner			
a) < 35 yr.	50.0	35.5	40.8
b) 35 – 45 yr.	16.7	41.9	32.7
c) >45 yr.	33.3	22.6	26.5
# Average age in years	39.11	39.12	39.12
Number of Beds			
a) 3 to 5	44.4	12.9	24.5
b) 6 to 15	50.0	64.5	59.2
c) 16 to 25	5.6	19.4	14.3
d) above 25		3.2	2.0
#Average number of beds	7.55	12.29	10.55
# Total Hospitals	**18**	**31**	**49**

(Figures are percentages with column=100, except those marked #)

Table 6: Care Provided

	Number of OPD cases and Indoor admissions		
	EBA	**EDA**	**Total**
Out patient department (OPD)			
Average cases treated			
Last day (number)	34.72	43.29	40.14
Last week (number)	161.06	199.03	185.58
Indoor admissions			
Admissions last week (number)	11.06	12.06	11.68
Admissions last month (number)	44.35	40.85	42.20
Length of stay (last month) (days)	6.90	16.38	13.32
Occupancy rate (last month) (percent)	54.68	48.98	50.81

Table 7: Staffing

	EBA	**EDA**	**Total**
Q Docs full time (allop)	14	32	46
Q Docs full time (oth. sys)	13	10	23
VC (Total)	38	52	90
Q Nurses	0	3	3
Q Technicians	2	6	8
Sweepers	11	29	40
Ward attendants	3	15	18
Receptionists	1	8	9
Others	19	17	36
Unqualified			
Nurses	15	71	85
Pharmacists	11	17	28
Technicians	0	2	2

Table 8: Qualifications of Doctors and Place of Practice

Doctors Practice	**EBA**	**EDA**	**Total**
Residence			
a) Same premises	83	71	75
b) does not reside	16	29	25
Doc-owners operating alone			

a) MBBS	6	10	8
b) Specialists	6	29	21
c) Other Systems of Medicine	28	-	10
Doc-owners with visiting consultants			
a) MBBS	50	6	22
b) Specialists	-	32	21
c) Other Systems of Medicine	10	23	18
# Total Hospitals	**18**	**31**	**49**

(Figures are percentages with column = 100 except those marked #)

Table 9: Services Provided

Types of cases treated	EBA	EDA	Total
Obstretics and Gynecological	17	13	14
Medical	22	19	20
Surgical	-	26	16
Gynecological and Medical	22	16	19
Surgical and Medical	6	10	8
Gynecological and Surgical	11	-	4
All types of cases	22	16	19
# Total Hospitals	**18**	**31**	**49**

Note:(Figures,except #, are in Percentages, columns = 100)

Table 10: Examinations, Emergency and Accidents

	EBA	EDA	TOTAL
Pathology Lab Present	11	23	18
Referral for path. Exams			
a) Same village/town	61	24	35
b) Different village/town	16	-	3
Blood Bank Present	0	0	0
Referral for blood			
a) Pvt. Blood bank	11	26	20
b) Cottage Hospital (Karad)	0	10	6
c) Pvt. Teaching hospital (Karad)	67	32	45
d) Refer the case elsewhere	22	13	16
Emergency cases			
a) Treat the cases	-	3	2
b) Preliminary treat. given & refereed	11	16	14
c) Refer directly	56	19	33
d) Do not admit	6	6	6
Place refereed			
a) Refer to Pvt. Hosp..	61	32	45
b) Refer to specialists	6	3	4
Treat for minor accidents cases			
a) Treat the case	33	68	55
b) Preliminary treatment & refereed	17	6	10
c) Refer to private hosp.	11	3	6
d) Refer to public hosp.	11	-	4
e) Do not admit.	28	23	25
Treat for road accident cases			
a) Treat the case	6	26	18

b) Preliminary treatment	28	16	20
c) Refer to Pvt. hosp.	11	13	12
d) Refer to Public	6	6	6
e) Do not admit	28	39	34
Treat for domestic accident cases			
a) Treat the case	11	48	35
b) Give preliminary treatment	11	6	8
c) Refer to Private hospital	28	6	14
d) Refer to public hospital	-	6	4
e) Do not admit	50	32	38
# Total	**18**	**31**	**49**

Note : Where % totals don't equal 100 the balance are 'No - responses'
(Figures are percentages except #, column = 100)

Table 11: Services Provided by Facilities

	Major OT	Minor OT	Labour room	Sterilsation Room
OB/GYN	5	-	2	4
Medical	3	2	-	1
Surgical	8	2	-	3
OB/Gyn & Medical	6	1	3	1
Surgical & Medical	3	-	-	2
OB/Gyn & Surgical	2	-	1	1
All care	9	3	2	3
# Total	**36**	**8**	**8**	**20**

(Figures are percentages except #, column = 100)

Table 12: Operation/Theatre Labour Room

Operation theatre present	73
Area adequate	11
Labour room present	16
Condition of the walls	
Good/clean	36
Dirty and Bad	64
Height below 8 feet	2
Above 8 ft	98
Condition of Ceiling	
Clean	51
Bad/Dirty/Leaking/Paint peeling	49
Condition of Floor	
Clean	54
Dirty/dusty/Cracked/Uneven	46
Lights	
Sufficient	55
Not Sufficient	45
Operation table present	71
Lithotomy present	37
Placement of equipment	
Organized	43
Unorganized	57
Trolley for instruments present	49

Shadowless lamp present	39
Wash basin with long handle tap	
Present	35

Note: (Figures are percentages, except #, Column=100)

Table 13: Equipment and Instruments In All Hospitals

Equipment and Instruments	Total
B.P Instruments	98
Larangyscope Adult	63
Larangyscope Child	53
Refrigerator	39
ECG monitor	10
Sterliser	65
Stretcher	51
#Total	**49**

(Figures are percentages except #, column=100)

Table 14: Equipment and Instruments In OB/Gyn Hospitals

Equipment and Instruments	Total
Suction machine	81
Oxygen cylinder with valves	52
OB forceps	81
Labour table with U-Cut Lithomy	74
Baby Weighing Machine	74
M.T.P Sets	59
#Total	**27**

(Figures are percentages except #, column=100)

Table 15: Select Equipment and Instruments For Surgical Hospitals

Equipment and Instruments	Total
Shadowless Lamp	65
Oxygen Cylinder with Valves	56
Lahem Table	26
Electro cautrey unit	39
Ventilator	13
Defribilator	9
X-ray viewers	57
X-ray machines	39
Autoclave	91
Boyles apparatus	0
#Total	**23**

(Figures are percentages except #, column=100)